

RECORD

90-

Field Note Book.

African Trip, 1957-58

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Calif. Academy of Sciences -
National Geographic Society -
Expedition.

Ideal
Account Book

5 RULINGS

ER 20 - R

EJ 20 - J

EC 20 - C

ES 20 - SEL

ED 20 - DEL

Size $7\frac{7}{8} \times 5\frac{1}{4}$

152 Pages

MADE IN U.S.A.

2] Aboard ship, 1 Cicindella + total - 2.

June 15/57 1 Katydid.

M. V. Del Campo of New Orleans, La.

1.] June 10, 1957. DEL RIO, TEXAS. total - 6

Mayflies, beetle, + Bemisia + ant.

to lights at night.

STOP 3 Aboard ship between Cape Verde Islands
and Dakar, F. W. AFRICA. June 29/57

Caught 10 Lepa + 1 small Hymenopt. total = 11

Latitude 15-00 N, Longitude 18-37 W.

STOP 4 June 30, 1957. Collected mainly at the

SENEGAL:
DAKAR

Botanical Gardens about four miles from
town + also at and along a coast road.

Samples from many Orders. Approximated
total, incl. ants + termites, = total = 650

spiders, ant lion larvae, butterflies - SENEGAL: DAKAR

STOP 5 - July 2nd, 1957 FRENCH GUINEA: CONAKRY.

Collected in city and at Bauscite loading Wharf.

Many Isopoda coll. One large springid, beautiful.

Also one large land snail collected. One cricket
was found (♂) in a 5" long hole in ground. It would
come to surface and chirp, then disappear at the
slightest disturbance total = 450

STOP 6: MONROVIA, LIBERIA. July 5, 1957.

Spent most of the day collecting in jungle forest. Opened up two termite nests and took out the queens and males and samples of workers, soldiers. Caught many small skippers, moths and Nitidulids + Hydrophilids in decayed breadfruit. Main collecting spot was near the bridge on the St. Paul River. Total - 1500
3 frogs also taken.

STOP 7: ABIDJAN, IVORY COAST - July 7, 1957.

All collecting was done in a forest jungle called "La Forêt Nationale du Banco", about six miles from ~~Abidjan~~ Abidjan. total = 200
Ross has at least four new species of Embiids.

STOP 8 F. Eg. AFRICA: GABON: ^{PORT} GENTIL ~~July 10/57~~

July 10, 1957. Collecting is excellent for beetles. Caught over 250 water beetles alone. One pond was full of Corixidae - small. Caught also 2 frogs. General collecting is good. Many Odontata + Hemiptera about. total = 1000

= Gabon: ^{PORT} ~~POINT~~ GENTIL: July 11, 57.

Same as July 10/57 only collected in grassy areas and forested regions: total app. 400

GABON: ^{PORT} GENTIL: July 12/57

minor collecting only: total 150

Caught some interesting tenebrionids + bees. Although I found no Myrmecidae alive, I found 2 dried ones in an ant nest. - no head or legs on either

GABON: PORT GENTIL: JULY 13/57 total = 240

Collected mostly beetles on the under side of leaves of trees at a height of 4-8 ft. ^{caught 3 small mice.}

GABON: PORT GENTIL: JULY 14/57 total 40

Weather not so good for collecting. However I did some. Noted two birds here: one, called locally, "Le Fou" or "the fool" is a big loon-like bird. It has the beak of a loon, the blue eyes, gray back + wings. white speckled bright body (except for a long neck) of a seagull, and the wings of an albatross. It glides about 20 ft. from the surface, then dives into the water like a pelican. The other bird is small, like an oversized plover. The head is capped ^{black} red + white, and the body is white. Locally called a "mouette".

STOP 9: MIDDLE CONGO: POINTE NOIRE: JULY 16/57

Collecting excellent. On one tree total = 2000
I caught over 500 beetles of many families, also one ^{in a creek} Dytiscid + 1 Hydrophilid. Of interest, one large, pretty caddisfly. (Trichoptera) All ~~term~~ termites and ants collected in + on bark of trees. Caught several spp. Sarcophagids + Simuliids

STOP 10 ANGOLA: LUANDA: July 18/57. total 2000

collected in slopy grasslands mixed with baobab trees. All large ~~Hymenoptera~~ Histerids found in animal feces, whereas all small Histerids are found in human feces. Numerous species of butterflies & grasshoppers. Observed an army of ponerine ants making a raid on a termite nest. Saw one snake about 8' ~~ft~~ long and a good 5" in diameter.

ANGOLA: LUANDA: JULY 19/57. total = 600

Collecting done in same area as the 18th, only with emphasis in a small creek.

Caught 2 spp. of Cicindellidae & one large Scarabaeidae on a flower - jet black.

frogs are numerous in spots.

STOP 11 BELGIAN CONGO: ANGO ANGO. ^{26.VII.57} total 900

Ango Ango is about six miles downstream from Matadi, and is only a wharf & several homes.

Collecting fairly good. Caught numerous small Hydrophilids, 1 Dytiscid, and many small Carabids. Bees & wasps are numerous, esp. Chalcids & Bombidae.

26.VII.57.

By Truck in the Congo.

STOP 1: BELGIAN CONGO: 6 mi N. MATADI: July 24, 1957

Collecting done at night. total = 150

Area is grassy with rolling hills. Gallery forests in valleys and in creek canyons. Dry season and cool.

STOP 2: BELGIAN CONGO: 18 mi N. MATADI: July 25, 1957.

Collecting done in morning till ^{noon} ~~evening~~ total = 1500

Area is a road slash ~~in~~ ^{new forest} in high mountain ~~at~~ top; insects numerous, but did most of the collecting under & in bark. Dry season.

STOP 4: BELGIAN CONGO: 6 mi. E. TSHELA: JULY 26, 1957.

Collecting done in a canyon total = 200 with a fair-sized creek. Area appears to be an ^{old} oil-palm plantation, but the jungle has grown over.

STOP 3: BELGIAN CONGO: 25: KM. S. TSHELA: JULY 25/57.

Area is relatively open in spots total = 400 near the highway. Collecting done mostly at night.

STOP 5: BELGIAN CONGO: 3 km. S. TSHELA: JULY 26/57.

Area is a ^{palm} ~~used~~ plantation total 100 area relatively open, but with thick patches of jungle. All the area around Tshela is in the Mayombe Forest.

STOP 5A: B. CONGO: 11 MI. S. TSHELA: 26-VII-57

Forest + banana grove; few palms.

STOP 6: BELGIAN CONGO: 50 KM. S. TSHELA: JULY 26/57

Area is jungle-like with a creek a few yards away. Collecting done mostly at dusk and after dark. total = 500

Bats seen, but unable to catch.

This is on the dirt road between Tshela and Matadi.

total = 900.

BELGIAN CONGO: 50 KM. S. TSHELA: JULY 27/57.

Same as July 26/57, except that most of the collecting was done during the day.

STOP 7: BELGIAN CONGO: 56 KM. N. MATADI: JULY 28/57.

Still in Mayombe Forest; total = 1000

Collecting done in an area where there is forest harvesting of large trees. A lot of under-bark collecting. Snakes are common here. Land is mostly regrowth near banana plantations.

STOP 8: BELGIAN CONGO: 36 KM. N. MATADI: JULY 28/57.

Collected in an old banana plantation total = 20.

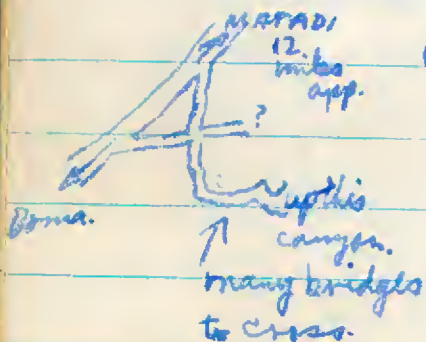
Got new spp. & more of old spp. of Embioptera.

STOP 9: BELGIAN CONGO: 12 MI. N. MATADI: JULY 28/57.

Camped over night here next total 300.

to a creek. Caught one Embiopteran at light.

All collecting done by lantern



STOP 10: BELGIAN CONGO: 17 MI. E. MATADI: JULY 29/57. total = 150

Collecting done at a small swamp area where snakes were thick. Some collecting done in still water.

STOP 11: BELGIAN CONGO: 40 MI. E. MATADI: JULY 29/57

Camped over night here. Area is with rolling hills and high grasses with patches of trees.

Collecting in general is poor. total = 250

This is on the Matadi-Leopoldville Road.

STOP 12: BELGIAN CONGO: 74 MI. E. MATADI: JULY 30/57

Dry Country; Grassy with occ. trees. total = 3

STOP 13: BELGIAN CONGO: 112 MI. E. MATADI: JULY 30/57.

Small valley with creek. Fauna was fairly rich, but as there were no Embioptera, we stayed only a short while. Did spot collecting in a mission orchard. The only ~~Termitid~~ Termitid found total = 100.

was in a termite nest, as were others like this found ^{previously}

STOP 14: BELGIAN CONGO: THYSVILLE: JULY 30/57.

about 1/2 mile west of Thysville in total = 300
a relatively thick forest. Fauna rich, so will return for more. Steep ground, well drained.

STOP 15: BELGIAN CONGO: 6 MI. E. THYSVILLE: JULY 30/57

Camped over night here. Area is grasslands that have been burnt over. Embioptera ^{sp} have come to light. Collecting all by light. total = 200

STOP 16: BELGIAN CONGO: THYSVILLE: JULY 31/57

Same place as stop 14: total = 450

STOP 17: B. CONGO: 7 MI. ^{SE} THYSVILLE. JULY 31/57.

Collected only under bark in logs in an old banana grove. total = 100

STOP 18: B. CONGO: KOLO (20 MI. SE. THYSVILLE) JULY 31/57.

Collected on a large agricultural experiment station. Varied jungle & open areas. total = 130

STOP 19: B. CONGO: ^{28 MI. THYSVILLE} 30 KM SE. KIED: JULY 31/57.

Night collecting only. total = 15

Stayed over-night here.

STOP 20: B. CONGO: 8 MI. SE. THYSVILLE: ~~JULY~~ ^{AUG. 1, 1957.}

Collected mainly under bark. total = 150

Area similar to stop 17, but is different in that there is no banana plantation, but only second growth jungle.

STOP 21: B. CONGO: 39 MI. SE. KISANTU: AUGUST 1, 1957.

Collected at roadside in a gallery total 200.

type forest. Many bushes & a few flowers.

(KISANTU speedometer rdng. = 3000)

STOP 22: B. CONGO: 68 MI. SE. KISANTU: AUG. 1, 1957.

Stayed over-night here. total = 75

very sandy soil with thick trees & grass.

Collected in late afternoon and evening.

Collecting poor because of cold weather. This is on the Kisantu - Popokabaka road.

(Speedometer rdng. 3068.

STOP 23: B. CONGO: 80 MI. SE. KISANTU:

AUG. 2, 1957.

(Speed. rdng. = 3080) Sandy soil & total = 205.

second growth jungle. Large *Stenopelmatus* found in manioc garden. Low, savannah ^{woods}

STOP 24: B. CONGO: ¹⁰⁴ 88 MI. SE. KISANTU: ³¹⁰⁴ (3088) AUG. 2, 1957.

Collected in two spots within total = 650

one mile of each other. One spot was high on a ridge in a newly cleared area, and the other was in a canyon with a creek and stagnant pools.

STOP 25: B. CONGO: ²⁴ 104 MI. SE. KISANTU ³¹⁰⁴ (3088) AUG. 2, 1957.

STOP 24: B. CONGO: 88 MI. SE. KISANTU (3088) AUG. 2, 1957

Dry, sandy area with low second ¹⁷⁵ total 200 growth. Here found mantids in egg cases of spiders.

STOP 25: B. CONGO: 104 MI. SE. KISANTU (3104) AUG. 2/57.

Collected at a plateau & in total = 650

in a creek area. About a mile separated.

Area on plateau was freshly cleared & burned.

STOP 26: B. CONGO: 127 MI. SE. KISANTU: ~~3127~~ (3127) AUG 2/57

Dry, sandy ground. Freshly cleared total = 300 area. Found one snake.

STOP 27: B. CONGO: ~~15~~ 40 MI. W. POPOKABAKA: AUG. 2/57.
(3138)

Camped here. Night collecting only. total = 75
Area was burnt-over savannah forest.

STOP 28: B. CONGO: 34 MI. W. POPOKABAKA: AUG. 3/57. total = 1
(3143.8) Dry, burned region much the same as Stop 27.

Stop 29: B. CONGO: 20 MI. W. POPOKABAKA: AUG. 3/57. total 35
(3158.3) Small canyon with swift creek and thick jungle.

STOP 30: B. CONGO: 15 MI. W. POPOKABAKA. AUG. 3/57 total 15
(3163.4) Dry region: sandy soil; not burned over.

STOP 31: B. CONGO: 10 MI. N. POPOKABAKA: AUG. 3/57 total 20
(3188.5) Dry, burnt-over, rolling hill top. Grass burnt down to nothing, but new green blades springing up. Large grasshoppers present - cannot catch.

STOP 32: B. CONGO: 47 MI. N. POPOKABAKA: AUG. 3/57. total 20
(3225.4) Dry, sandy region. Not burned over; low trees

STOP 33: B. CONGO: 57 MI. N. POPOKABAKA. AUG. 3/57 total 50
(3235.3) Burned over recently; dense savannah forest. large flat hill top; windy at times

STOP 34: B. CONGO: KENGE: AUG. 4/57. total = 30.
(32686)

Mostly butterflies; this was at the river boat crossing; Caught one extremely large Papilionid. Area near dense jungle.

STOP 35: B. CONGO: 3 MI. E. KENGE: AUG. 4/57. total = 200
(3271.9)

Heavy jungle region. Caught one large Hemipterid. Some spots cleared by cutting, but as all the slash was left on the ground, coll. was excellent.

STOP 36: B. CONGO: 14 MI. E. KENGE. AUG. 4/57. total = 800
(3282.4) ^{camped here.}

Gallery forest in deep canyon. One fair sized creek here. Jungle-type forest. Caught some water-surface insects and one wasp with nest.

STOP 37: B. CONGO: 34 MI. E. KENGE: AUG. 5/57. total = 100
(3302)

Near creek in a jungle-like canyon.

STOP 38: B. CONGO: 61 MI. E. KENGE: AUG. 5/57. total = 75.
(3329.3)

At river crossing; at urinated spot there were many bees & wasps.

STOP 39: B. CONGO: 74 MI. E. KENGE: AUG. 5/57. total = 15
(3341.7)

At river crossing again; dense jungle at edge.

STOP 40: B. CONGO: 108 MI. E. KENGE: AUG. 5/57. total 25
(3385)

Quick stop; Dense jungle & heavy clouds blocked out sun. Creek collecting & some net. Fish caught in creek; probably lyretails.

STOP 41: B. CONGO: 125 MI. E. KENGE: AUG. 5/57. total = 300
(3402.6)

Camped here; collecting fair mayfly-wise; Largely palm-oilgroves; dense jungle in spots camped next to a creek. Night coll. only.

STOP 42: B. CONGO: 56 MI. N. LEVERVILLE: AUG. 6/57 total = ?
(3413.7)

Took Embioptera only.

STOP 43: B. CONGO: 44 MI. N. LEVERVILLE: AUG. 6/57. total = 110.
(3425.0)

General collecting in lowland gallery forest. Early morning catches. Took some photos.

STOP 44: B. CONGO: 36 MI. N. LEVERVILLE: AUG. 6/57 total = 100
(3433.2)

Coll. at a freshly fallen felled tree of considerable size. Some coll. in light sun spots on jungle floor. Area is dense gallery forest.

STOP 45: B. CONGO: 11 MI. N. LEVERVILLE: AUG. 6/57. total = 100

(3457.5) Open marshy spot in low valley. Dense forest surrounding in spots. Bees & Lepidoptera came to puddles of stagnant water at the edge of the road. Dragon flies numerous, but amazingly fast.

STOP 46: B. CONGO: 10 MI. S. LEVERVILLE: AUG. 6/57. total = 8

(3479.4) Short stop for Emtipora; none found. gallery forest type jungle;

STOP 47: B. CONGO: ~~12~~ ¹² MI. ~~S.~~ ^{E.} KIKWIT: AUG. 6/57 total = 35

(3512.2) Camped here; night collecting only. High flat mesa; grassy land; ^{always windy} sandy soil. Very few trees. Saw one goliath beetle about 6:30 A.M.

Many of Genus Copris seen flying.

STOP 48: B. CONGO: 26 MI. E. KIKWIT: AUG. 7/57. total = 5

(3525.6) Slopy grasslands above gallery forest.

STOP 49: B. CONGO: 33 MI. E. KIKWIT: AUG. 7/57 total = 1

(3533.2) Same region as stop 48. One Copris rolling ball of dung caught in roadway

STOP 50: B. CONGO: 63 MI. E. KIKWIT: AUG. 7/57 total = 250

(3563.0) Stops at creek and in gallery forest in creek canyon for a distance of 3 miles.

STOP 51: B. CONGO: 97 MI. E. KIKWIT: AUG. 7/57. total = 100

(3597.2) Open grassy area with swift-flowing creeks. Water clear and fresh, but warm.

STOP 52: B. CONGO: 25.0 MI. S. IDIOFA: AUG. 7/57. total = 600

(3633.9) Idiofa is on the KIKWIT-PORT FRANKQUI road. and about 100 KM E. of KIKWIT. Area ^(altitude) is high, grassy mesa; Camped here; night collecting only.

STOP 53: B. CONGO: 91 MI. S. IDIOFA: AUG. 8/57. total = 500

(3649.7) flat, grassy mesa with some areas burned. Same as stop 52 in texture & no. of trees.

STOP 54: B. CONGO: 16 MI. N. KILEMBE: AUG. 8/57. total = 1

(3683.3) In shallow depression from mesa near a rather large creek.

STOP 55

KILEMBE READING = 3683

total = 1 wasp.

19 MI. S. — LOANGE RIVER BAR (3702)

STOP 56: B. CONGO: 42 MI. S. KILEMBE: AUG. 8/57. total = 7

(3725) Light second-growth shrubbery; fresh by fallow rain brought out many insects, but we made only a short stop as virtually a half village came running down the road to watch us.

STOP 57: B. CONGO: 52 MI. SE. KILEMBE: AUG. 8/57 total = 30

(3735.2) Dry forest in savannah forest region; about 2 mi. did some ground digging for Scarabaeids away is a deep river canyon with thick forest.

STOP 58: B. CONGO: 67 MI. SE. KILEMBE: AUG. 8/57. total =

(3750) Night coll. only, and very poor at that.

STOP 59: B. CONGO: 17 MI. NW. TSHIKAPA: AUG. 9/57 total = 650

(3764)

Small patch of 2nd storey, cleared unburned forest. 50 yards each side of the road have been cleared of brush and the tall trees have been left. About 9-11 A.M.

STOP 60: B. CONGO: 16 MI. NE. TSHIKAPA: AUG. 9/57 total = 5

(3796.0)

2nd storey forest with burned areas & cleared.

STOP 61: B. CONGO: 29 MI. NE. TSHIKAPA: AUG. 9/57 total = 4

(3869.0)

Fairly dry open region in spots; in particular, the closest wooded area was a good 200 yds away.

STOP 62: B. CONGO: 34 MI. NE. TSHIKAPA: AUG. 9/57 total = 12

(3814.1)

2nd storey jungle with no cleared areas.

STOP 63: B. CONGO: 74 MI. NE. TSHIKAPA: AUG. 9/57 total =

(38535)

Camped here; coll. by lights; region is fairly open and is between two large forests. Some close surrounding area is covered with high grass. Area is not burned over.

LULUABOURG

3950.0

(3935.0)

STOP 64: B. CONGO: 76 MI. W. LULUABOURG: AUG. 10/57 total = 75

(3859.2)

Early morning stop at Luelo River Crossing (bridge) 2nd storey jungle to edge of river; ^{rock bottom river} unburned.

STOP 65: B. CONGO: 23 MI. E. LULUABOURG: AUG. 10/57. total = 25

(39586)

Small river with sandy bottom and surrounding soil. Thick savannah woods unburned.

STOP 66: B. CONGO: 62 MI. E. LULUABOURG: AUG. 10/57. total = 250

(3997.6)

Rolling hills with low grass. Camped here. This is a few miles E. of Lake Munkamila.

STOP 67: B. CONGO: 70 MI. E. LULUABOURG: AUG. 11/57 total = 275

(4005)

Grassy, rolling hills with trees clustered thinly in areas. Morning collecting.

STOP 68: B. CONGO: 32 MI. W. LUSAMBO: AUG. 11/57 total = 1

(4040.4)

2nd storey jungle with some cleared, burned areas.

STOP 69: B. CONGO: 22 MI. W. LUSAMBO: AUG. 11/57. total = 400

(4050)

Low jungle with some high trees. Dense coll. mainly on the road. Some native boys helped here.

STOP 70: B. CONGO: 7 MI. W. LUSAMBO: AUG. 11/57 total = 65

(4064.7)

LUSAMBO

4071.8

Fairly open dry country with clusters of low trees.

STOP 71: B. CONGO: 16 MI. E. LUSAMBO: AUG. 11/57 total = 250

(4087.2)

Doryline (Dorylus) ants from marching trail. Some photos of ants on march.

STOP 72: 21 MI. E. LUSAMBO: AUG. 11/57. total = 125

(4092.8)

Camped here; night coll. only; high on sandy ridge; in grove of kambo ^{oil} & palm ^{oil} jungle on other side of road.

STOP 72: B. CONGO: 21 MI. E. LUSAMBO: AUG. 12/57. total = 35

(4092.8)

Morning catch of a few moments.

STOP 73: B. CONGO: 39 MI. E. LUSAMBO: AUG. 12/57 total = 750

(4111.1)

Mid morning to noon catch; small creek running through a broad, spottily-jungled canyon; still sandy soil.

STOP 74: B. CONGO: 132 MI. E. LUSAMBO: AUG. 12/57. total = 225

(4204.2)

Camped here; night collecting mainly.

^{but see other}
^{copy of diary which}
^{Says 48}
Rolling grasslands with small clumps of forests in scattered regions

STOP 75: B. CONGO: ⁵⁸MI. W. KIBOMBO: AUG 13/57. total 75

(4228)

At ferry at Lomami River; fair-sized river in sparse savannah woods region ground fairly flat & sandy; many large fields of 3 foot 3 foot grass ^{Riverine forest dense}

STOP 76: B. CONGO: 58 MI. W. KIBOMBO: AUG 13/57. total = 6

(4250)

Mostly flat savannah woods region with some dense areas. Momentary stop.

STOP 77: B. CONGO: ²³MI. W. KIBOMBO: AUG 13/57 total = 10

(4283)

Same type area as stop 76.

STOP 78: 14 MI. W. KIBOMBO: B. CONGO: AUG 13/57 total = 125

(4292)

Galling forest; thick & humid jungle. damp ground; some spots with small puddles provided excellent Lepidop collecting

KIBOMBO READING = (4306)

STOP 79: B. CONGO: 20 MI. E. KIBOMBO: AUG. 13/57 total = 300

(4326)

Gravel ground; rolling grasslands with some swamp areas; borassia palms saw some (about 30) elephants here;

STOP 80: B. CONGO: 62 MI. E. KIBOMBO: AUG. 14/57 total = 300

(4368)

Fairly dense forest; quite damp. 2nd storey jungle. 3 vials

(200 KM. SE. KINDU)

STOP 81: B. CONGO: KAMA: AUG. 14/57. total = 15

(4449)

↓
4487

Mission at Kama. Some cleared areas, but mostly low jungle. 3 vials

B. CONGO: KAMA: AUG. 15/57. total = 200

Coll. in territory surrounding Kama

Mission for few kilometres in each ^{direction}

STOP 82: B. CONGO: 36 MI. E. KAMA: AUG. 16/57 total = 50

(4523)

This region has been cleared and burned in many large spots. Buprestids were numerous, but burned and 1/2 burned logs, but were too wary and fast to catch many. Clearing made for coffee plants.

STOP 83: ~~45~~ B. CONGO: 45 MI. E. KAMA: AUG 16/57. total = 850

(4532)

Some cleared regions and some unspoiled. Coll. over a 3 mile region along the road with elevation variations of from ^{1 vial} 700-800 meters.

STOP 84: B. CONGO: 73 MI. E. KAMA: AUG. 16/57. total = ~~175~~ 400

(4560)

Camped here; fairly open spot at roadside in mountainous region. Surrounding area has 2nd storey jungle that is undisturbed

2 alcohol vials

STOP 85: B. CONGO: 44 MI. W. KAMITUGA: AUG 17/57 total = 175

(4571)

9:00 AM. stop; some creek and hillside collecting.

Two Hygrinids (♂ & ♀) taken preferred to swim in swiftest part of the current. 650 M. alt

(248 KM. W. Bukavu)

STOP 86: B. CONGO: 33 MI. W. KAMITUGA: AUG. 17/57. total = 800
(4582)

Stopped here at the crossing of the Kizila R.
675 M. alt. Mostly bees at and in mud
cliffs.

STOP 87: B. CONGO: 15 MI. W. KAMITUGA: AUG. 17/57: total = 20
(4600)

This is 202 KM W. of Bukavu. Small ravine
with nearby creek. Some ~~uncleared~~ ^{burned} ~~burned~~ ^{cleared},
cleared, unburned areas with 2nd stony
jungle surrounding. 700 M. alt.

STOP 88: B. CONGO: 6 MI. W. KAMITUGA: AUG. 17/57 total = 30
4609

Coll. over a 6 mile range with altitude
varying from 850-950 M. Very steep
mountainous region with high jungle.
Up higher on the mountains some mines
could be seen; heavy quartz region.

STOP 89

KAMITUGA READING: 4615

STOP 89: B. CONGO: 4 MI. E. KAMITUGA: AUG. 17/57. total = 65
(4619)

Momentary stop check for Eulipoteria; none found.
alt: 1000 meters. high on the slope; many burned
+ cleared areas; no 2nd stony trees.

STOP 90: B. CONGO: 33 MI. E. KAMITUGA: AUG. 17/57. total = 75
(4648)

Camped here; Ulindi River Canyon. Night coll-
only. Night was rather ^{cool} ~~and~~ ⁺ ~~and~~ coll. was poor.

STOP 91: B. CONGO: 37 MI. E. KAMITUGA: AUG. 18/57. total = 125
(4652)

1100 meters altitude. High hills with
grass. Trees in canyons between hills
and in main canyon. 1 vial

STOP 92: B. CONGO: 46 MI. E. KAMITUGA: AUG. 18/57: total = 75
(4661)

930 meters altitude; fairly broad, open apart
in main canyon. Near native village,
so much of the area was cleared of brush,
but the larger trees left. 1 vial

STOP 93: B. CONGO: ⁴¹ 2 MI. W. BUKAVU: AUG. 18/57. total = 100
(4684)

Altitude was 1500 meters. High plateau
region with ^{page} ~~low~~ hills and with ~~marsh~~
marshes in low sections. Continuously
windy, but clear + warm sun. 3 vials

STOP 94: B. CONGO: ²⁷ 8 MI. W. BUKAVU: AUG. 18/57. total = 200
(4698)

1650 meters altitude; Creek between two grass
covered hills; still continuously windy.
Did creek collecting + ^{2 vials} ~~manure~~ examination.

STOP 95: B. CONGO: ¹⁵ 15 MI. W. BUKAVU: AUG. 18/57. total = 12
(4710)

2100 meters altitude; camped here; hill top
covered with eucalyptus grove; very cold +
windy; little coming to light except mosquitoes.

STOP 96

Bukavu Reading = 4725

STOP 96: B. CONGO: 5 MI. N. BUKAVU: Aug 19/57. total = 25
(4730)

At entrance to some hot springs. This is on the shore of Lake Kivu ~~on~~ route to Lwiro from Bukavu. 1 vial

Stop 97: B. CONGO: Lwiro: Aug 19/57. total = 75
(4761)

Collected on the grounds of the J. R. S. A. C.

Areas mostly open. 1 vial.

STOP 97: - UVIRA - VII-20-57

STOP 98: B. CONGO: 8 MI. S. UVIRA: ^{800m} AUG 19/57 total = 85

On shore of Lake Tanganyika. West shore Rocky outcrop with some bushes + trees.

STOP 99: B. CONGO: 15 MI. S. UVIRA: AUG. 21/57. total = 60
~~80~~

Same type region as stop 98.

STOP 100: B. CONGO: 25 MI. S. UVIRA: ^{800m} AUG. 21/57. total = 90

Savannah forest type area about 1/2 mile from shore

STOP 101 Uvira Reading = 4924

STOP 101: B. CONGO: 10 MI. N. UVIRA: AUG. 22/57. total = 100
(4934)

Brachystegia + Euphorbia forest (very sparse 800m. altitude. Alluvial deposit gravel.

STOP 102: B. CONGO: 22 MI. N. UVIRA: AUG. 22/57. total = 50
(4946)

Same type ground as No. 101, except this time at a river.

STOP 103: B. CONGO: 30 MI. N. UVIRA: AUG. 22/57. total = 25
(4954)

Sparse savannah type region. Alt. = 960m. Caught some lizards of the gecko type

STOP 104: B. CONGO: 36 MI. N. UVIRA: AUG. 22/57. total = 50
(4960)

alt = 1000m. hill plateau; barren mostly except for grass + occasional bushes.

STOP 105: B. CONGO: 47 MI. N. UVIRA: AUG. 22/57. total = 100
(4971)

alt = 900m. Camped here. Na₂CO₃ hot springs

STOP 106: B. CONGO: LWIRO: I.R.S.A.C.: AUG. 25/57 total = 20

Lwiro station. Same as stop 97. 1 vial

STOP 107: B. CONGO: LWIRO RIVER; 1900 M.; 47 KM. N. BUKAVU.

AUG. 25/57. total = 2000

A On the J. R. S. A. C. Grounds upon the mountain 4 KM. uphill from Lwiro and the J. R. S. A. C. Laboratories. Coll. mostly in meadow regions, in dung of cows, and in a small creek, the Lwiro River.

STOP 107: B. CONGO: LWIRO RIV. FALLS, 2000 M., 47 KM N.

BUKAVU; AUG. 26/57. total = 350

B Same region as yesterday, except up the river further in more mountainous + wooded region. Coll. on both sides of the river at the ~~to~~ level of the falls.

STOP 107: B. CONGO: LWIRO RIV., 2000 M., 47 KM. N. BUKAVU;

AUG. 27/57 total 75

C Coll. only in the afternoon; cloudy day, rain threatening. coll. poor

STOP 107: B. CONGO: LWIRO RIV.; ^{2200m} ~~1900m~~ 47 KM. N. BUKAVU

AUG. 28/57. total = 1200

D Coll. mainly on higher slopes.

STOP 107: B. CONGO: LWIRO RIV., 2100M., 47KM. N. BUKAVU
AUG. 29/57. total = 900.

E Upon the hills - bracken with some trees
many flowers in spots.

STOP 107: B. CONGO: LWIRO RIV., 2000M., 47KM. N. BUKAVU
AUG. 30/57. total = 700

F Mostly coll. in marshy region as source
of small side creek of Lwiro Riv.

Specific region is called Tshibati

STOP 107: B. CONGO: LWIRO RIV.; 2100M., 47KM. N. BUKAVU.
31.VIII.57. total = 100.

G Coll. poor because of cloudy day. Coll.
mostly at Lwiro falls region. Caught
one green treeviper - handled same.

STOP 107: B. CONGO: LWIRO RIV. 2100 M., 47KM. N. BUKAVU
H SEPT. 1, 1957. total = 75

STOP 107: B. CONGO: LWIRO RIV.; 2000M., 47KM. N. BUKAVU
I 2.IX.57. total = 600

STOP 108: B. CONGO: 20KM. N.W. KAVUMU: 4.IX.57. total = 75
(5258) In the Kahuzi Mts; at a small stream.
a few feet from the road were large bamboo
forests. 6600 Ft. alt.

KAVUMU READING = (5246)

4.IX.57

STOP 109: B. CONGO: MT. KAHUZI: 1700M., total = 55
(5274) ON WEST SLOPE. Camped here.

Stop 108 can also be labelled
B. CONGO: MT. KAHUZI, 6600 FT.

STOP 110: B. CONGO: MT. KAHUZI: 1900M., SEPT. 5/57.

South Slope of Mtn., some total = 400
cleared regions. Some streams & many
rotting logs of fair size.

STOP 111: B. CONGO: MT. KAHUZI: 2200M. SEPT. 5/57.

Some meadows. South Slope. total = 125
small creek had some interesting
larval cases of Tricoptera. Still
in Bamboo forest region

STOP 112: B. CONGO: MT. KAHUZI: 2200M., SEPT. 5/57.
Same as stop 107. total = 450

STOP 113: B. CONGO: MT. KAHUZI: 1900M.; SEPT. 6/57.

Open savannah type with total = 2.
many giant lobelia stalks visible. Some
20' trees, but few others of any height. Took
photos (still & movie) of 2 Melrid katies
eating morning glory flowers.

STOP 114: B. CONGO: BUNYAKIRI: (ON THE KAVUMU-WALIKALE)
1100M.; SEPT. 6/57. total = 300 Route

Large Canyon on west slope of MT. KAHUZI;
Generally there is a large amount of 1st Growth
jungle, but some low second growth. Some
slopes are almost barren where natives have
done slash burning.

STOP 114: B. CONGO: BUNYAKIRI (KAVUMU-WALIKALE ROUTE)

1100 M, 7.1X.57:

total = 900

Coll mostly in the dense forests above and below Bunyakiri and around within four miles. One creek, but poor yield. There are some cleared spots where natives have banana plantations.

STOP 115: B. CONGO: 9 MI. N. BUNYAKIRI: 850 M; SEPT. 8/57
(5330)

Small stream. 2nd story forest with occasional clearings for native villages; ~~There is a small stream in the forest.~~

total = 60

STOP 116: B. CONGO: 15 MI. N. BUNYAKIRI: 800 M; SEPT. 8/57.
(5336)

2nd story jungle with many cleared regions; Took many photos and movies of *Speocidia* & nests.

STOP 117: B. CONGO: I.R.S.A.C. IRANGE: 900 M; SEPT. 9/57
(5345)

This is the I.R.S.A.C. Research station on the Kavumu-Walikale route. It is at Km. 110 by the present route, but a new route straight from Bukuru may cause confusion as to its location for future ~~work~~ ^{work} in the region. for future work in this region. ~~This is dense jungle everywhere except by the road.~~ This is dense jungle everywhere except by the road. 7 alcohol vials.

STOP 117: B. CONGO: I.R.S.A.C. - IRANGE: 900 M; SEPT. 10/57. total = 700

Some coll. along the road, but more in the native trails in the jungle. Good coll. where sun came through to jungle floor.

STOP 117: B. CONGO: I.R.S.A.C. - IRANGE: 900 M; SEPT. 11/57. total = 950

Photography most of morning. Coll. only short time in afternoon as there was rain storm. Same regions as Sept. 10/57. ↑ 3 vials

STOP 117: B. CONGO: I.R.S.A.C. - IRANGE: 900 M; SEPT. 12/57. total = 600

Photos of ♀ mantid guarding eggs. Mostly coll. along the road. 7 vials

STOP 118: B. CONGO: 52 ^{MI.} SE. WALIKALE: 700 M alt 13; SEPT. 13/57. total = 125
5370

Stop in road at pile of animal dung. Butterflies love to suck out the liquid.

800 M. alt. Regrowth jungle at roadside

STOP 119: B. CONGO: 39 Km. S. WALIKALE: 700 M alt. SEPT. 14/57. total = 500
(5399)

F.I.S. (Federation Internationale Scientifique)

Camp. Place where they are filming with animals (esp. gorillas) for 1958 International Exhibition in Brussels, Belgium. Rain forest.

STOP 120: B. CONGO: 12 MI. S. WALIKALE: SEPT. 15/57. total = 75
5410

Middle of road coll. of butterflies & few bees on animal dung.

WALIKALE READING = 5422.

GOMA READING = 5746

STOP 121: B. CONGO: 13 MI. E. WALIKALE: SEPT. 15/57. ^{775M.} total = 100
5435.

Center of road coll. in dung piles & urinated spots. Much jungle, but many villages (native)

STOP 122 B. CONGO: WALIKALE: SEPT 16/57. total = 25.
5497

Returned to Walikale as there was a bridge out on the Walikale - Goma Route. Have to go back via Lranga and Lwiro. 750 M. alt. This is a mining region, and much of the ground has been cleared.

STOP 123: B. CONGO: 15 MI. S.E. WALIKALE: 700 M. total = 15
(5512)

Small roadside spring. Many dragon flies about - in swamp nearby, there were countless frogs. Much second-storey forest in hilly country. Some interesting rock structures in the roadbank.

STOP 124: B. CONGO: KM. 153 on Kavuuvu - Walikale Route: 700 M. ^{total} 30

In gold mining region. Much of the area has been surface-stripped, and much has been cleared of trees. Some 2nd storey jungle about 50 yds from the road. 16 IX 57

STOP 125: B. CONGO: I.R.S.A.C. - LRANGE; 800 M: SEPT. 16/57 total = 25

Same as stop 117: at km 110 on the Kavuuvu Walikale Route.

SEPT. 17/57

STOP 126: B. CONGO: KM. 94 - KAVUUVU - WALIKALE ROUTE total = 125
5573

900 M. alt. Same as stop 116. It is 9 mi S. of Lranga.

SEPT 19, 1957

STOP 127: B. CONGO: 16 MI. N. GOMA: 1450 M; total = 75
5762

At lower end of Park Albert & also at the beginnings of the lava beds. Low forest growth; thick plant growth. Very rich, black, volcanic soil.

STOP 128: B. CONGO: 52 MI. N. GOMA; 1475 M; ^{SEPT. 19/57} total = 40
5798

Same type region as stop 127; this is at the Park Albert Headquarters at Butshuru; some 2nd storey forest

STOP 129: B. CONGO: 82 MI. N. GOMA: 1050 M; SEPT 20/57 total = 140
5828

Plains-type country; Rivers & swamps are full of Hippos and elephants; buffalo and antelope are in the grass; There is a rich beetle fauna in elephant dung.

STOP 130: B. CONGO: RWINDI, S. SHORE LAKE EDWARD: SEPT 21/57
5955

Plains-type ground. Some forest total = 75 in the river canyons. Typical east-African type plains.

STOP 130 B. CONGO: RWINDI, S. SHORE LAKE EDWARD SEPT 22/57
5955

Same as yesterday.

total = 75

STOP 131: 26 MI. S. LUBERO: SEPT. 22/57 total 9
(6011) Camped overnight here; Mostly eucalyptus and acacia forests on hill tops with regular forest in the canyons.

STOP 132: B. CONGO: 9 MI. S. LUBERO: SEPT. 23/57 total=75
(6028) 2150 M; Still in eucalyptus and acacia groves, but lower than down than Stop 131 and more in the canyons with the natural forest.

STOP 133 LUBERO READING: 6037

STOP 133: 13 MI. S. BENI: SEPT. 23/57; 1500 M; total=24
(6084) Fairly open region; almost plains-type forest, but with ground surface rather hilly. Much grassy area.

BENI READING=6097

STOP 134: B. CONGO: MUTSURA: 1200 M; SEPT. 23/57 total=75
(6124) This is in PARK ALBERT in the Semliki River Canyon. Camped here. Muturango is just a few hundred meters away.

STOP 134: B. CONGO: MUTSURA: 1200 M; SEPT. 24/57 total=450
(6124) Mostly sweep-net coll. on grassy regions

STOP 135 is while the group is climbing the Ruwenzori. Recordings of groups of insects coll. is done every 300 meters or whenever convenient

STOP 135: B. CONGO: RUWENZORI: STANLEY GROUP;
1500 M; SEPT. 25/57. total=150
Low on the range; grassy slopes up to the 1700 meter mark. About 1750 M, the forest-jungle starts

STOP 135: B. CONGO: RUWENZORI: STANLEY GROUP:
1850 M; SEPT. 25/57. total=250
Some snail shells; one black + white pupilis 2 web. Nycterobiidae found on fruit bat. Photos for identification.

STOP 135: B. CONGO: RUWENZORI; STANLEY GROUP
2138 M or 7013 FT; SEPT 25/57 total=95
This is the cabin for the first night. Did night coll only. Cleared section in natural forest

STOP 135: B. CONGO: RUWENZORI: STANLEY GROUP: SEPT. 26/57
2300 M; total=16

Lower edge of thick forest, bamboo section, and beginnings of tree-heath zone;

STOP 135: B. CONGO: RUWENZORI: STANLEY GROUP:
SEPT. 26/57; 2800 M; total=30
Tree-heath zone; the ground is covered thickly (2½-3') with moss. Moss is thick with Carabidae, sow-bugs, & cockroaches.

STOP 135: B. CONGO: RUWENZORI; STANLEY GROUP:
SEPT. 26/57; 3200 M; Total=30
top regions of tree-heath zone. Beginnings of taller trees with much spanish-moss type material hanging.

STOP 135: B. CONGO: RUWENZORI: STANLEY GROUP.

10,857 ft. or 3310 m. SEPT. 26/57. total = 50

Second overnight rest house, (named Mahangu)
atop lower hill at base for final assault.

STOP 135: B. CONGO: RUWENZORI: STANLEY GROUP.

3500 m; SEPT. 27/57 total = 25

Final few of heath growth with moss.
Trees are cypress-like and continue up
to 3800 m; moss still thick on ground.

STOP 135: B. CONGO: RUWENZORI: STANLEY GROUP.

4000 meters; Sept. 27/57. total = 125

one vid. full of weevils etc from
rotting lobelia stem. From 3850
meters, the lobelia is abundant.

Final Camp - Bottle Camp; 4200 meters.
light snow and hail when I arrived
at 1:00 P.M.

STOP 135: B. CONGO: RUWENZORI: STANLEY GROUP.

3800 m; SEPT. 28/57 total = 60

Tree-heath zone mixed with a number
of lobelia and composite bushes. Ground
and bushes much wetter after snow and
rain storm.

STOP 135: B. CONGO: RUWENZORI: STANLEY GROUP.

3200 m; SEPT. 28/57. total = 30

Entirely the tree-heath zone.

STOP 135: B. CONGO: RUWENZORI: STANLEY GROUP.

2600 m; SEPT. 28/57. total = 35

Larger trees occasionally. Look much
like the Calif. Nutmeg tree (conifer). Just
at top of bamboo. 2 1/2 foot moss layer
covering all ground.

STOP 135: B. CONGO: RUWENZORI: STANLEY GROUP.

2300 m; SEPT. 28/57. total = 11

In thickest part of bamboo section
Also a lot of tall deciduous trees.

STOP 135: B. CONGO: RUWENZORI: STANLEY GROUP.

1900 m; SEPT. 29/57. total = 65

Forest-jungle region with some open
grassy spots near the path.

STOP 135: B. CONGO: RUWENZORI: STANLEY GROUP.

1500 m; SEPT. 29/57. total = 500

Grass region - did mostly sweep net
collecting. Many small Hymen + Dipt.

STOP 135: B. CONGO: RUWENZORI: RUWENZORI HOTEL;

1300 m; SEPT. 29/57 total = 75

Night collecting at the lights of the
Ruwendgori Hotel at the base of the Ruwendgori

Beni Reading 6144

STOP 136: B. CONGO: 40 MI. S. MAMBASA: 950M; SEPT. 30/57

(6214) Camped here. Beginning of the total=12
Ituri forest. Much 2nd storey jungle with
Musenga (parasol) trees growing fast
in cleared. The road is newly cut, so
many freshly-felled trees around the roadside.

STOP 137: B. CONGO: 24 MI. S. MAMBASA: 950M; OCT. 1/57. total=600

(6227) Same type region as stop 136.

Mambasa Reading = 6251

STOP 138: B. CONGO: CAMP de l'EPULU: 950M;
OCT. 1/57.

(6292) Right at the banks of the Epulu total=200
River. Much of the 2nd storey forest has
been cut out around here.

STOP 138: B. CONGO: CAMP de l'EPULU: OCT. 2/57; total=1200

Coll. in an area cleared by elephants. Much
brush and small trees piled in heaps,
where coll. of beetles & flies is good.

STOP 138: B. CONGO: CAMP de l'EPULU: OCT. 3/57; 950M; total=500

Coll. mostly in forest sunspot areas;
some coll. along roadside in puddles
for waterbeetles.

STOP 139: B. CONGO: ~~CAMP de l'EPULU~~ MONT HUYO: OCT. 5/57

1250M; total=250

Some collecting in caves and some
outside in 2nd storey forest. Inside of
cave was alive with cockroaches, pitiful
and saw bugs. 2 spp. of bats for Dr. G.H.

STOP 139: MONT HUYO, B. CONGO: 1250M; OCT. 6/57. total=1200

Field coll. along forest roads and paths.
over 140 Lepidoptera & Odonata. No cave collecting.

STOP 140: B. CONGO: 23 MI. S. NIOKA: 1700M; OCT. 8/57. total=40

(6533)

Small patch of indignant forest;
quite dense in spots with black berry
type bushes.

NIOKA READING = 6556

UGANDA REGION.

STOP 141: UGANDA: 36 MI. W. PACKWACH; 1350M.

(6601)

OCT. 8/57. total=100

Plains-type savannah. Much 3rd &
grass and a few scattered thickets of
trees. Mostly alcohol material.

STOP 142: UGANDA: 25 MI. W. PACKWACH

(6612)

1300M; OCT. 8/57 total=4

Same type region as previous stop.
1 vial of alcohol only with 3 spiders
(large) and 1 mantid.

PACKWACH READING = 6637.

STOP 144: UGANDA: 27 MI. W. MURCHISON FALLS.

(6671)

1050M; OCT. 8/57. total=25

Open grasslands with very sparse
trees. Much of the area has been burnt-over
sometime in the past year. Camped here.

STOP 145: UGANDA: PARAA, MURCHISON FALLS PARK;
(6700)

800 m; OCT. 9/57. total = 100

Paraa is on the Victoria Nile a few miles downstream from the Murchison Falls. Edge of river is swampy and sandy. Some thick beds of papyrus in spots. The sandy sections of shore are the good collecting spots.

STOP 145: UGANDA: PARAA; MURCHISON FALLS PARK:

800 m; OCT. 10/57 total = 50

Same as Oct. 9/57.

STOP 146: UGANDA. 27 MI. N. PARAA; MURCHISON FALLS PARK

1050 m; OCT. 10/57 total = 250

Typical East-African Grasslands; same ^{mass coll. of Citoninae} spot as STOP 144. Camped here.

STOP 147: UGANDA: 31 MI. S.W. GULU: 1100 m; OCT. 11/57. total = 50.

(6768) Coll. up in high branches of a large tree. 1 alcohol vial only. Coll. under orchids growing ~~and~~ up in the tree. Mainly ants.

STOP 148: UGANDA: 15 MI. S.E. GULU: 1175 m; OCT. 11/57. total = 150

(6784) Roadside coll. during lunch. Mostly off grass. Fairly wooded savannah type country. Quite dry ground.

STOP 149

GULU READING: 6799.

STOP 149: UGANDA: 8 MI. N. GULU: 1200 m; OCT. 11/57 total = 75
(6808)

Area is a forest grove planted by the Government. A reserve forest. Densely wooded. I (Kush) caught a single ♂ *Solen Tarsakemboides*

GULU READING = 6814

STOP 150: UGANDA: GULU: 1200 m; OCT. 11/57. total = 30

(6814) Coll. at lights of Govt. Rest houses.

STOP 151: UGANDA: 33 MI. N.W. LIRA: 1100 m; OCT. 12/57 total = 40

(6847) Coll. in roadside swamp. Mainly water bathing. 1 large Dytiscid (1 1/4") Grassy swamplands.

STOP 152

LIRA READING = 6880

STOP 152: UGANDA: 13 MI. S.E. LIRA: 1120 m; OCT. 12/57 total = 200

(6893) Roadside collecting. Hot, dry ground covered with grass about waist high. Peculiar-shaped palm trees and some ^{kind of} deciduous trees are numerous. Thick native inhabitation.

KABERAMAI DO READING = 6925

STOP 153: UGANDA: 8 MI. N.E. KABERAMAI DO: 1175 m:

(6933) OCT. 12/57, total = 300

Savannah woodlands. Camped here. Mosquitoes are thick for first time in Africa.

KABERAMAI DO

STOP 154: UGANDA: 10 MI. N.W. SOROTI: 1100M;
(6959)

OCT. 13/57 total = 75

Dry savannah region with some rather large outcroppings of rocks. Baboons + monkeys abound on the rocks.

* SOROTI READING = 6969

Mbarale Reading = 7048

STOP 155: UGANDA: 13 MI. N.E. MBARALE: OCT. 13/57.
(7061)

1300M; total = 75

Getting into taller trees at foot hills of Mt. Elgon. This is on the road that goes around the North side of Mt Elgon through Lipi, Uganda.

STOP 156: UGANDA: 37 MI. N.E. MBARALE: OCT. 13/57. 1470M
(7075)

total = 15

This is just at the beginnings of the first incline. Same type of savannady woods

STOP 157: UGANDA: NE. Slope Mt. Elgon: 1875M;
(7080)

OCT. 13/57. total = 50

Small waterfall near the road. Good spot for Citoninae. Many Kanara plantations near by.

STOP 158: UGANDA: N. Slope Mt. Elgon. 2050M;
(7105)

OCT. 13/57. total = 200.

Camped here. Low forests with low grass some Anethrina trees; mountainside vegetation

STOP 159: UGANDA: N. Slope Mt. ELGON: 2200M;
(7110)

OCT. 14/57. total = 400

In dense forest reserve on mountain slopes. Thick B trees + thick underbrush. Near Kapkwata Forest Station.

STOP 160: UGANDA: N.E. Slope Mt. ELGON: 2000M;
(7127)

OCT. 14/57. total = 175

Stop slopes now. Low dry grass. Trees are sparse + thick short in stature. Many rocks on ground surface.

STOP 161: KENYA: 19 MI. N.W. KITALE: 1950M; OCT. 14/57
(7143)

total = 42.

Lunch stop. Dry acacia grasslands.

Poor collecting under stones + on trees.

~~STOP 162~~ Kitale Reading = 7162:

STOP 162: KENYA: 30 MI. S.E. KITALE: 1950M;
(7192)

OCT. 14/57; total = 100

Small creek near some small stands of dense woodlands in a canyon. Good water beetle spot.

STOP 163: KENYA: 38 MI. S.E. KITALE: 2100M;
(7200)

OCT. 14/57 total = 60

Dry rocky grasslands. Good spot for Tenebrionids. Rolling hills.

STOP 164: KENYA: 63 MI. N.W. NAKURU: 2550m;
(7239)

OCT. 14/57. total =

In a reserve forest. Many cedar trees
about. No rocks on surface in the forest

STOP 165: KENYA: 52 MI. N.W. NAKURU: 2700m; OCT. 15/57 total = 30
(7250)

In the Jimboroa Forest. Bamboo and
coniferous forests. Coll. mainly on some
daisy-like flowers at the roadside.

NAKURU READING: 7302 coll. 1 sarcophagid mite

STOP 166: KENYA: 3 MI. S.E. NAKURU: 1900m; OCT. 15/57 total = 5
(7305)

Lunch stop. dry rolling grasslands. Hot
weather at the moment.

STOP 167: KENYA: 17 MI. S.E. NAKURU: 1900m; OCT. 15/57; total = 250
(7319)

Rolling hills with rocky outbursts at the top.
Many boulders and rocks on the slopes make
good under-stone collecting. Few trees.

STOP 168: KENYA: 49 MI. S.E. NAKURU: 2300m; OCT. 15/57 total = 2
(7351)

Second growth bush country. Extremely strong
+ cold winds made collecting poor.

Camped here.

NAIVASHA READING 7345

STOP 169: KENYA: 38 MI. N.W. NAIROBI: 2640m; OCT. 16/57 total = 150
(7378)

In dense bamboo forests. Cool weather
and quite windy. Most insects caught
on leaves of nettles (sting very sharp)
1 small snake + one vial alcohol.

TANGANYIKA

NAIROBI READING: 7416

STOP 170: KENYA: ATHI RIVER: 1530m; OCT. 19/57. total = 200

Low ^{tree +} grasslands; eastern savannah.
Swamps nearby make good water-
beetle collecting. Camped here.

KATIADO READING = 7585

STOP 171: KENYA: 23 MI. S. KATIADO: 1630m; OCT. ¹⁹20/57. total = 125
(7607)

Camped here. Now in good sight
of Mt. Kilimanjaro; ^{dry} savannah type:
now in dry season.

STOP 172: KENYA: 9 MI. N. NAMANGA: 1300m; OCT. 20/57 total = 25
(7628) dry savannah; coll. in dead tree.
alcohol vials only. 2 beetles layered.

NAMANGA READING = 7637

STOP 173: TANG. TERR: 12 MI. S. NAMANGA: 1425m;
(7649)

OCT. 20/57 total = 150

dry savannah in dry season.
alcohol vials only.

STOP 174: TANGANYIKA: 24 MI. S. NAMANGA: 1300m;
(7661)

OCT. 20/57 total = 150

dry savannah near mt. base.
all alcohol vials and 1 butterfly ^{layered}

STOP 175: TANGANYIKA: 22 MI. N. ARUSHA: 1850 M;
(7683)

Oct. 20/57 total = 50

dry savannah, mostly grassy at base
of Muru Crater. Coll one snake
with black ring on neck.

ARUSHA READING = 7705

STOP 176: TANGANYIKA: 58 MI. W. ARUSHA: 1060 M;
(7763)

Oct. 20/57 total = 500

Near waterhole; dry grasslands.
flat plains & small hills.

STOP 177: TANGANYIKA: 65 MI. W. ARUSHA: 1000 M;
(7772) See label made in other book

Oct. 21/57; total = 500

Forest at base of crater (NGORONGORO)
just below slopes. Dense forest.

STOP 178: TANGANYIKA: S.E. SLOPE NGORONGORO CRATER
(7781) 1530 M; Oct. 21/57 total = 35

Starting to climb; turned over stones
mainly. dry grasslands; occasional tree

STOP 179: TANGANYIKA: SE. SLOPE NGORONGORO CRATER
(7806) 2300 M; Oct. 21/57 total = 75

Forests and meadows. Now in the
Crater Park.

STOP 180: TANGANYIKA: INSIDE ON W. SLOPE
NGORONGORO CRATER: 1850 M;

Oct. 21/57 total = 50

Normally bare, grassy slopes now with
eucalyptus trees planted thinly

(81): TANGANYIKA: NGORONGORO CRATER FLOOR: 1800 M;

Oct. 21/57 total = 500.

Coll on the only fig trees in the crater.
at a place called "Fig tree Kopje".
Cetoniinae + Pentatomidae + Tenebr.

STOP 182: TANGANYIKA: WINDY GAP, NGORONGORO CRATER
23. X. 57; 2100 M; ~~23~~ total = 125

~~STOP 183: 1~~ Dry grasslands, no trees; many
rocks for turning over. 3 lizards

STOP 183: TANGANYIKA: E. FLANK NGORONGORO CRATER
OLBALBAL 1750 M; 23. X. 57 total = 450

dry, sloping, savannah; ^{CAMPED HERE} many large
rocks for turning: one large snake

STOP 184: TANGANYIKA: SERONERA,
SERENGETI PLAINS
1580 M; 23. X. 57. total = 500

^{FIRST RAIN OF SEASON} dry savannah. ^{dry season} 2 bats in and house
4 lizards, 2 spp. ^{FIRST RAIN TONIGHT.} ^{CAMPED HERE.}

STOP 185: TANGANYIKA: NHAZI, SERENGETI PLAINS,

1750 M; Oct. 25/57 total = 125

Mainly embosoma; one goat spot
for a group of ants. one lizard

STOP 186: TANG: E. GATE SERENGETI PARK;

1950 M; Oct. 26/57 total = 25

Dry mountain forest. Still no rain
here, although it rained heavily on the
plains at stop 184.

S.E.

STOP 187: TANGANYIKA: E. FLANK NGORONGORO CRATER

1600m; 26.X.57. Total=40

Dry, grassy slopes; some stones in with the soil; dry ground & no rain yet here. Some tall grasses (4-5 ft)

(NOTE) N.W. CORNER LAKE MANYARA.

STOP 188: TANG: MTO WA MBO (65 MI. W. ARUSHA)

1100m; 26.X.57 Total=600

Same spot as No. 187, but did some collecting a few hundred yards outside and above the forest on the Escarpment (). Very dry, rocky soil on the Escarpment.

ARUSHA = 8237

STOP 188: TANG: E. BASE MT. MERU: 1500m; Oct. 28/57. Total=24

(8260)

Semidry, open country. Few stones, but tight, fine-sanded soil is poor for collecting. Beginning of short rainy season. (lizard)

Main season is in April-June.

STOP 189: TANG: E. BASE MT. MERU: 1630m; Oct. 28/57

(8262)

Rain forest just after a light rain. Small creek nearby provided some interesting frogs. Total=200

STOP 190: TANG: E. BASE MT. MERU: 1700m; Oct. 28/57.

(8267)

Dense rain forest. Total=400

Light rain a few hours before.

Many rotting logs. Large trees with rough bark. Many monkeys.

Beginning of shorter Rainy Season

STOP 191: TANG: N.E. BASE MT. MERU: Oct. 29/57

(8274)

Dry savannah. Very ^{1500m} dry; Total=1000

Ngare Nanyuki. Many small streams here that come off Mt. Meru.

STOP 192: MOSHI READING = 8289 8318

STOP 192: TANG: 11 MI. E. MOSHI; 890m; Oct. 29/57. Total=100

(8329)

Very dry savannah with a light, almost pumice-like lava rock in abundance on the surface. No rain here yet.

STOP 193: TANG: 13 MI. E. MOSHI; 880m; Oct. 29/57; Total=80

(8331)

Small creek with residual pools; in a small gallery type forest in the ^{dry} savannah region. Riverine forest.

HIMO READING = (8334)

STOP 194: TANG: MAMBA: SE. BASE MT. KILIMANJARO;

(8344)

1440m; Oct. 29/57; Total=450

Mt. rain forest; small creek, thick forest, and many banana plantations.

KENYA

TAVETA READING = 8361

STOP 195: KENYA: 2 MI. E. TAVETA; 840M; Oct. 29/57.

(8363)

Camped here.

total = 500

Riverine forest in dry savannah.

STOP 196: KENYA: 9 MI. E. TAVETA; 950M; Oct. 30/57. total = 350

(8370)

Dry savannah region after a short rain.

Shorter Rainy Season: few baobab trees

STOP 197: KENYA: 45 MI. E. TAVETA; 1060M; Oct. 30/57 total = 1

(8406)

Dry savannah; recent rain. Acacia trees with fresh green leaves; grass still yellow & dry. Coll. only 1 moth.

STOP 198: KENYA: S. SLOPES TEITA HILLS: 1030M; Oct. 30/57

(8420)

Banana & sugar cane

total = 100

plantations; some original acacia savannah.

STOP 199: KENYA: S. SLOPES, TEITA HILLS: 1170M; Oct. 30/57 + NOV. 1/57

.8422

total = 300

Small creek & mt. riverine forest. Very near the "Coast Girls' School," a large school for girls (European); Agricultural fields region.

WUNDANYI

NOV. 1

STOP 200: KENYA: ~~USE KENYA~~ 1, TEITA HILLS; Oct. 30/57

(8430)

1450M; total = 400

Agricultural area; many eucalyptus groves. Heavy rains at the present time. Coll. mainly after the storm. Camped here. Correct the labels in layers for here.

STOP 201: KENYA: 3 MI. E. MAKTAU, TEITA HILLS; NOV. 1/57.

(8466)

1150M; total = 125

Dry, dense savannah region; just after a heavy rainstorm during the shorter rainy season; new-leaf foliage on the acacia & other trees. Camped here.

Maktau Reading = 8516

STOP 202: KENYA: 11 MI. S. MAKTAU, TEITA PROV.;

(8505)

1000M; NOV. 2/57. total = 2200

Camped here two nights. Combined the nights & days coll. into one date, Nov. 2/57. Fair estimate at 2200 collected.

Thick, dry savannah after some recent rains; sandy soil generally. Did some coll. at a rock outcrop.

N.B. MAKE CORRECTION ON ALL (layers + bottles) LABELS FOR THIS STOP

STOP 203: KENYA: 8 MI. N.W. VOI: 700M; NOV. 4/57; total = 25

(8544)

Dry savannah; drier region than STOP 202. Crystalline rocks & soil.

Voi Reading = 8552.

STOP 204: KENYA: 49 MI. N.W. MOMBASA: 450M; NOV. 4/57.

(8597)

Dry savannah; no recent rains. Total = 75. Sandy soil with crystal rocks.

STOP 205: KENYA 57: 31 MI. N.W. MOMBASA: 375M; NOV. 4/57.

(8615) Dry savannah; rolling hills; ⁴⁵ Total = 12.5
large slabs rocks on surface; sand
and sedimentary soil + rocks.

STOP 206: KENYA: 10 MI. N.W. MOMBASA: NOV. 4/57; ⁴⁵ Total = 17.5

(8636) Indigenous forest with 230M;
much banana + palm introduced.

MOMBASA ENTRANCE = 8646

MOMBASA EXIT = 8649

STOP 207: KENYA: KWALE; 450M; NOV. 5/57; ⁵⁰⁰ Total = 35

(8668) Mostly an agricultural ~~land~~ region,
but some of the original forest is here
and there. Coll. all day in a dense
bit of original forest. 8 vials alcohol.
Camped here;

STOP 207: KENYA: 4 MI. S. KWALE (SABLE ANTELOPE
RESERVE) 450M; NOV. 7/57. Total = 500

The High (trees only) forest on hill tops.
Grassy slopes in lower parts of the
hills. 2nd story trees + dense undergrowth.

STOP 208: KENYA: SIMU BEACH, KWALE: ^{see level;} 0 ~~mi~~; NOV. 7/57.
(8705) Total = 300

Sandy beach; large baobab trees frequent.
Much drift of leaves, etc, make good coll.
right on the beach. Camped here.

TANGANYIKA

KWALE READING = 8700

STOP 209: KENYA: 28 MI. S.W. KWALE: 175M; NOV. 8/57. Total = 250.
(8748)

savannah type country. Trees are
larger than the normal or typical
savannah. Recent rains have made
the trees with leaves and the ground
covered richly with green grass.
This is on the Kwale-Tanga route.

~~STOP 210~~

TANGA READING = 8815 TANGANYIKA.

STOP 210: TANGANYIKA: 14 MI. W. TANGA; 100M; NOV. 8/57.

(8829) Camped here. Total = 150

Rich sisal farm region. Also the
occasional coconut palm grove.

STOP 211 TANG: AMANI; 850M; NOV. 9/57. Total = 1300

(8865) Camped here from Nov. 9 - Nov. 11,
2 nights. Dense mt. forest with
cleared areas and one man-made lake.
NO LIGHT COLLECTING

STOP 212: TANG: 10 MI. S. AMANI; 160M; NOV. 11/57. Total = 100

(8875) 2nd story forest in river canyon. Surrounding mts
are also densely forested. Embury's stop

STOP 213: TANG: AMBONI CAVES, TANGA: 40M; NOV. 11/57.

(8922) Total = 30
Limestone caves about four miles north
of Tanga

STOP 214: TANG: 10 MI. ^E KOROGWE; 300 m; NOV. 11/57 total =
(8974)

Camped here: sparse 2nd stony forest
with thick undergrowth. plain sandy ground.

KOROGWE READING = 8984

~~STOP 214~~ MOMBO READING = 9010

STOP 215: TANG: 2 MI. E. MOMBO: 550 m; NOV. 12/57.
(9012)

Dry, sparsely-treed slopes. total = 50
Rocky outcrops here & there. Somewhat
savannah region. This is on the road
to Lushoto in the Usumbara Mts.

STOP 216
~~STOP 215~~
(9033)

TANG: FOREST RES. AT LUSHOTO; 1300 m;

NOV. 12/57. total = 10

Just a few hundred yards down the hill
from Lushoto on the way to Mombo. 2nd
stony forest with somewhat dense under-
growth in spots. Heavy rains for the day
have just ended.

STOP 217: TANG: 6 MI. E. MOMBO: 830 m; NOV. 12/57. total = 100
(9041)

Same type region as STOP 215; more trees
here because in a small canyon where
a creek forms in the rainy season.

MOMBO READING = 9053

KOROGWE READING = 9071

STOP 218: TANG: 3 MI. S.W. KOROGWE: 620 m; NOV. 12/57. total = 400
(9108)

Dense savannah growth. Trees are
close together and fairly large; because
of damp soil & recent rains grass is lush.
CAMPED HERE. Recently burned.

HANDENI READING = 9118

STOP 219: TANG: 15 MI. S.W. HANDENI; 630 m; NOV. 13/57. total = 75
(9133)

Dry savannah after rains. This whole region
has all been recently burned. Tree trunks
are blackened, and the old grass roots
show burning. Tightly packed sandy soil.

STOP 220: TANG: (NEAR MZIMBA) 40 MI S.W. HANDENI; 475 m;
(9158)

NOV. 13/57. total = 50

Lunch stop: hilly country; dry savannah
after recent rains: in shorter wet season

STOP 221: TANG: (NEAR LUSANGA) 54 MI. S.W. HANDENI;
(9172)

400 m; NOV. 13/57. total = 50

Dry savannah after recent rains;
tightly packed sandy soil. Area has
been burned over recently.

STOP 222: TANG: (NEAR MHONDA) 62 MI. S.W. HANDENI;
(9180)

400 m; NOV. 13/57. total = 125

Dense forest spot: some agriculture;
ground is dry; NO Burnings 2nd stony high

STOP 223: TANG: ¹⁵ MI. N.W. MOROGORO: 400 m;
(9221)

NOV. 13/57. total = 225

Dry savannah recently burned over; rains
come over night, but all effects are gone by
morning; tightly packed soil; many trees
are dead & drying. Camped here.

MOROGORO = 9242

LEAVING MOROGORO = 9249

STOP 224: TANG: BUNDUKI, ULUGURU MTS. total = 800
(9276) (MORO GORO) 1200 M; NOV. 14/57

Mountain canyon with remnants of the original forest. Agriculture of the natives has raised the edge of the original forests to the extreme mt. tops. Induced trees are mainly eucalyptus and pine. Daily and evening rains.

STOP 225: TANG: 1 MIN. MGETHA: 800 M; NOV. 15/57. total = 35
(9285)

Rocky canyon and burnt grasslands. Occasional baobab tree. This is coming out of the Uluguru Mts from Mgetha to Mlali.

Morogoro Reading = 9285 (Computed from sign)

STOP 226: TANG: MORO GORO - IRINGA ROUTE; 20 M. S.W. MORO GORO
(9305)

450 M; NOV. 15/57. total = 175

Burnt savannah; tightly packed sandy soil with rocks below surface. Recent burning and recent rains.

STOP 227: TANG: MORO GORO - IRINGA ROUTE: 51 M. S.W. MORO GORO
(9336)

500 M; NOV. 15/57. total = 75

Dry savannah and recent rains. This is during the Shorter Raining Season. Occasional thickets have buffalo in them. Rich elephant dung fauna.

STOP 228: TANG: MORO GORO - IRINGA ROUTE: 82 M. S.W. MORO GORO
(9367)

530 M; NOV. 15/57. total = 125

Small rain creek in a canyon. All the area save near and in the creek bed has been burnt recently. Rich waterbutterfly & snail fauna.

STOP 229: TANG: MORO GORO - IRINGA ROUTE: 95 M. N.E. IRINGA.
(9377)

475 M; NOV. 15/57. total = 25

Large river canyon; rocky; rich savannah-type growth and NO BURNING. Riverine forests; baobab trees plentiful.

STOP 230: TANG: MORO GORO - IRINGA ROUTE: 78 M. N.E. IRINGA.
(9394)

475 M; NOV. 15/57. total = 20

River canyon. Dry savannah-type country and steep hills; baobabs + acacia plentiful. NO very recent rains.

STOP 231: TANG: MORO GORO - IRINGA ROUTE; 56 M. N.E. IRINGA:
(9416)

575 M; NOV. 15/57. total = ⁷⁰⁰~~400~~

Dry savannah in a large, wide, river canyon. Ground is quite dry. Camped here.

Iringa Reading = 9468

STOP 232: TANG: 6 M. N. IRINGA: 1475 M; NOV. 16/57.
(9474)

total = 50

Dry, rocky, hilly, savannah; area has been burnt within last year. NO RAIN

NOTE STOPS 238—247
ALL HAVE HAD RAIN DAILY

STOP 233: TANG: 30 MI. N. IRINGA: 1200 M; NOV. 16/57. total = 60
(9498)

Dry savannah; ^{woods} Embiotina stop.

NO RAINS: small rocky hill;

STOP 234: TANG: 75 MI. S. DODOMA: 1750 M; NOV. 16/57. total = 200
(9551)

Valley flats bordered by savannah ^{woods}
Scrub area out in valley center.

Camped here:

STOP 235: TANG: 12 MI. S. DODOMA: 1100 M; NOV. 17/57; total = 25
(9610)

Dry, rocky, hilly savannah woods.

NO rains yet.

DODOMA READING = 9622

STOP 236: TANG: 2 MI. N. DODOMA: 1050 M; NOV. 17/57; total = 15
(9624)

Savannah, dry & rocky; NO RAIN

Large granite hill just north of the city
and immediately north of the airstrip &
radio transmitter. Good coll. spot, but
stayed only 15 minutes

STOP 237: TANG: 38 MI. N. DODOMA: 1350 M; NOV. 17/57. total = 75
(9660)

Large boulders in a hilly savannah region.
Some areas have been burnt; NO RAIN

KOLO READING: 9732

STOP 238: TANG: 4 MI. N. KOLO (114 MI. N. DODOMA)
(9736)

1700 M; NOV. 17/57. total = 1000

Low, dense hilltop forest.

Camped here; NO RAIN, but cool nights

RAIN DAILY
BARATI = 9780

STOP 239: TANG: 13 MI. S. BARATI (113 MI. S. ARUSHA); 1550 M;
(9767)

NOV. 18/57. total = 300

Mt. forest region on the West Escarpment
of the Rift Valley.

STOP 240: TANG: 6 MI. N. BARATI (94 MI. S. ARUSHA) 1150 M;
(9786)

NOV. 18/57. total = 75

near small volcanic cone; large
boulders strewn about. burnt grasslands

STOP 241: TANG: 2 MI. S.W. ARUSHA; 1300 M; NOV. 18/57. total = 75
(9859)

Volcanic; boulders; grasslands & hilly.
No burning recently. This is on the
Dodoma-Aruscha Highway.

ARUSHA = 9880 ^(enter) ARUSHA = 9883 ^(leaving)

STOP 242: TANG: 6 MI. W. N. ARE NANYUKI (N. BASE MT. MERU)
(9606)

1500 M; NOV. 19/57 total = 200

Grasslands & rocks at the North
Base of Mt. Meru. hilly region.

STOP 243: TANG: 30 MI. N. ARUSHA: 1300 M; NOV. 19/57. total = 100
(9933)

Take off 16 miles from distance of speedometer
because of 16 mile side trip to base of Meru Mt.
hill of granite rock in sparse savannah

STOP 244: TANG: LONGIDO (46 MI. N. ARUSHA) NOV. 19/57; 1300 M;
(9949)

Base of Longido Mt. at a total = 6
gas station and border check station.
hilly savannah. Water puddle of water.

DAILY RAINS TO
STOP 247

↓ - 4 miles for back trip.

STOP 245: KENYA: NAMA NCHA (TANG-KENYA BORDER)
(9970)

1300 m; NOV. 19/57. total = 250

a few hundred yards from the town
at the base of the Oldoinyo Dok hills
hilly savannah.

STOP 246: KENYA: 75 MI. S. NAIROBI; 1550 m; NOV. 19/57 total = 125
(9999)

a few (25)?? miles south of Kajiado
and near the Lokodulit hills.
Open savannah. Camped here.

STOP 247: KENYA: 40 MI. S. ATHI RIVER; 1550 m; NOV. 20/57.
(036)

Large boulders in grasslands total = 7
one single outcrop distant from others

STOP 248: KENYA: ATHI RIVER; 1500 m; NOV. 20/57. total = 1000
(056)

Open savannah and rocky outcrops.
boulders on ground in spots.
same as stop 170 Camped here.

Athi River coming & going = 056 - 076.
Nairobi (enter) = 094 Leaving = 107

STOP 248: KENYA: NGONG HILLS; NAIROBI-MAGADI ROAD;
(130)

1780 m; 22.XI.57 total = 125

Small rocky section in the east face
of the Rift escarpment. Short scrub (thorn)
and lava rock here, but mainly grassy
hills

NO RAINS FROM STOP 248-251

STOP 249: KENYA: NGONG HILLS; NAIROBI-MAGADI ROAD
(135)

1500 m; NOV. 22/57. total = 30

Savannah, but no grass on the
ground - gravel-type soil. lava rock.

STOP 251: KENYA: RIFT VALLEY; ^{NAIROBI-MAGADI ROAD 25 MI. N. MAGADI} 4 MI. S. NAIROBI
(152)

on the NAIROBI-MAGADI ROAD: total = 450

900 m; NOV 22/57

Rift valley floor; rocks & thornbushes.
Camped here. No rains

MAGADI READING = 177 (in) + 178 (out)
RAIN TODAY - NOV. 23/57.

STOP 252: KENYA: NAIROBI-MAGADI ROAD: 8 MI. N. MAGADI:
(186)

775 m; NOV. 23/57. total = 75

Mimosa bushes flowering & seeding. Citronella
eating the flowers. Rocky, volcanic soil;
open hilly savannah; on small hill
in the main Rift Valley. Rains

STOP 253: KENYA: NAIROBI-MAGADI ROAD: 11 MI. N. MAGADI:
(189)

830 m; NOV. 23/57. total = 350

Camped here; gravelly soil; grass in spots
only; open bush & savannah country; hilly rain.

STOP 254: KENYA: NAIROBI-MAGADI ROAD: 33 MI. N. MAGADI:
(211)

1000 m; 24/NOV./57. total = 75;

Gravelly soil with larger volcanic formed boulders.
rugged hills and thorny bush.

STOP 255: KENYA: NAIROBI-MAGADI ROAD: 17 MI. S.W. NAIROBI
(229)

1800 M; NOV. 24/57. total = 25

Small creek in rounded, grassy hills; creek is there possibly only after the rains have begun: recent rain.

STOP 256: KENYA: 6 MI. S.W. NAIROBI; ENDEMIC FOREST.
(240)

1725 M; NOV. 24/57. total = 35

Small endemic forest at the S.W. corner of the Nairobi park. This is still on the Nairobi-Magadi Road.

Nairobi = 246

STOP 257: KENYA: KINGFISHER CYN; NAIROBI PARK.

1600 M; NOV. 24/57. total = 40

Grasslands at top of a canyon in Nairobi Game Park.

STOP 258: KENYA: ATHI RIVER: 1500 M; NOV. 24/57. total = 125

Same as Stops 170 + 247

~~STOP~~ NANYUKI READING = 418

STOP 259: KENYA: 24 MI. N.E. NANYUKI: 1950 M;
(442)

NOV. 25/57. total = 25

On the north slopes of Mt. Kenya in a mountain rain-forest region. It had been raining all day, then let up for several hours. Rained off & on during night and early from 6: A.M. to 12: noon then to 2:00 P.M. Many "conifers", probably cypress.

Dense daily and nightly rains from Nairobi north to Nanyuki and Isiolo, Kenya. Shorter Rainy Season

STOP 2 151040 READING = 467 1075 M. alt.

STOP 260: KENYA: 6 MI. S. 151040: 1250 M; NOV. 26/57
(463)

total = 1000

Slow slopes of eastern savannah. Irrigated rains; fresh grass and green leaves everywhere. In spots, boulders (volcanic) are on the surface and make wonderful hauls under them.

STOP 261: KENYA: 19 MI. E. THOMPSON'S FALLS: 1925 M; NOV. 27/57
(556)

Open savannah; hilltop; heavy rains just stopped, and are in a momentary break. total = 100

THOMPSON'S FALLS = 575

STOP 262: KENYA: 19 MI. N.E. NAKURU: 2600 M; NOV. 27/57.
(595)

high (alt.) mountain forest. total = 150
bamboos also in forest quantities
Flowers collecting along the road mainly.

≠ NAKURU = 614

STOP 263: KENYA: N. SHORE LAKE NAKURU: 1750 M; NOV. 27/57.
(619)

Sand (volcanic) and swamp + shore grass. Camped here total = 1000

NAKURU = 622

STOP 264: KENYA: KISUMU-NAKURU ROAD: 25 MI. N.W.
(647)

NAKURU: 2300 M; NOV. 28/57. total = 200

Endemic forest just south of Kalo, Kenya
Dense forest; much undergrowth. Main escarpment.

STOP 265: KENYA: 28 MI. E. KISUMU: 1300M; NOV. 28/57. total = 20
(704)

No recent rains; flat ground mostly, sloping off to Lake Victoria: sisal farms and open savannah; some rocks on surface in spots.

KISUMU READING = 732

STOP 266: KENYA: MASENO: N.W. of KISUMU: 1550M;

NOV. 28/57. total = 1

one pauasid caught on floor of the house. Maseno C.M.S. Mission farmlands and eucalyptus groves.

STOP 267: KENYA: KAIMOSI MISSION, 27 MI. NE. KISUMU:

1650M; NOV. 29/57 total = 1000

Endemic forest. Cold mostly in swamp in creek canyon and mid. Park on ~~the~~ trees freshly fallen. Slept here.

STOP 268: KENYA: S. NANDI FOREST; N.E. of KISUMU; 1850M;

NOV. 29. XI. 57 total = 300

On the Kapsabet-Kisumu Road, and about 6-8 miles from Kapsabet. Endemic forest. + somewhat disturbed in areas.

UGANDA

STOP 269: UGANDA: 6 MI. W. BUSIA: 1150M; DEC. 1/57. total = 100
(933)

Endemic forest - tropical; dense undergrowth. Busia is just at the Uganda Kenya border at the North end of Lake Victoria

JINJA READING = 992

STOP 270: UGANDA: ^{FOREST,} 10 MI. W. JINJA: 1200M; DEC. 1/57. total = 800
(007)

Endemic forest (Nana-something) Very dense, with large trees; rotting logs and loose bark made exc. collecting.

KAMPALA READING = 042

STOP 271: UGANDA: BUTO FOREST; 15 MI. W. KAMPALA.

(062)

1200M; DEC. 1/57. total = 125
~~50~~

Endemic forest; mud roadside; slashing; Camped here.

Mityana Reading = 088

STOP 272: UGANDA: 17 MI. E. MUBENDE: 1200M; DEC. 2/57.

(127)

Bush country; swamps total = 25 between the low hills. Also banana crops scattered; recent rains.

STOP 273: UGANDA: 7 MI. E. MUBENDE: 1250M; DEC. 2/57.

(137)

Lunch stops; Roadside total = 100 collecting for Embrioptera; Combination bush country and meadows; rolling hills; sandy ^{bad} soil with dirt and rocks

Mubende Reading = 144

STOP 274: UGANDA: 8 MI. W. MUBENDE: 1250 M; Dec. 2/57

(152)

Small dense forest. Collected total = 35
at a small stream at roadside that
was formed from rain about an hour
ago. sandy base soil with dirt
Joint Portal = 243 in & 247 out.

STOP 275: UGANDA: KASENYI, Q. ELIZ. PARK; 950 M; Dec. 3/57.

Savannah; and brackish total = 400
water. At the Fisheries Research Institute

STOP 276: UGANDA: KATWE, Q. ELIZ. PARK. 950 M; Dec. 4/57.

Katwe is on the north shore of total = 175
Lake Edward. Savannah, grasslands
and euphorb forests all in same
region.

STOP 277: UGANDA: MARIAMACAMBO FOREST, Q. ELIZ. PARK.
1000 M; Dec. 4/57. total = 400

Very dense euphorb + acacia savanna
forests. this forest is at the most south
western corner of Q. ELIZ. Park.

STOP 278: UGANDA: 16 MI. N. BUSHENYI: 1450 M; Dec. 6/57 total = 175

(348)

Small patch of endemic forest amid native
farms and villages. No rocks anywhere. rounded hills
(peneplane)

Bushenyi Reading = 564

RUANDA

Mbarara Reading = 599

STOP 279: UGANDA: 11 MI. S. E. MBARARA: 1350 M; Dec. 6/57.

(610)

Savannah; recent rains total = 400
have made grass come up to about three
feet. This is in the Masha Bame Reserve.
Camped here. Good day collecting, but
poor night collecting.

STOP 280: UGANDA: ~~1375 M~~; 16 MI. S. MBARARA: 1375 M; Dec. 7/57.

(615)

Same as stop 279, but this total = 6
had a road bank for Embioptera

STOP 281: UGANDA: 34 MI. S. MBARARA: 1200 M; Dec. 7/57. total = 150

(633)

This is app. 8 miles east of Kikagata (641)
a small mining settlement. River
Canyon; numerous rocks on the surface.
Near the river are large and plentiful
trees, but up in the hills above it is
regular open savannah.

RUANDA:

Kakitumba Reading = 663

RUANDA:

STOP 282: ~~18 MI. S.~~ 18 MI. S. KAKITUMBA: 1475 M;

(681)

Rains.

Dec. 7/57. total = 800

This is on the western edge of the
Kagera Park. Singular rocky outcrop
in a hilly grasslands + savannah
region.

STOP 283: RUANDA: GABIRO, KAGERA PARK; Dec. 8/57.

1325M; total = 800

Grasslands and open savannah (hilly)
Did road collecting in puddles and
grass sweeping at roadside. Stayed
here for two nights.

N.B.

Speedometer on the blink, so readings for
a while will be in kilometers

STOP 284: RUANDA: 6 MI. S. GABIRO; 1475M; Dec. 9/57. total = 2

One grasshopper and one tick; tick found
on the ground. This is on the Gabiro-Kisiguma
Road. Bush; savannah; native farms.

STOP 285: RUANDA: 40 KM. E. KIGALI; 1575M; Dec. 9/57. total = 1200

Rolling pasture land and brush; rocks
on surface. Many *Panurgids* found with
Pheidole spp. ants.

STOP 286: RUANDA: KIGALI; 1600M; Dec. 9/57. total = 7

Hilly and grassy with many valleys having
papyrus swamps.

STOP 287: RUANDA: 20 KM. N. ASTRIDA; 1625M; Dec. 9/57. total = 21

Camped here. Large swamp nearby;
we are in a large grove of eucalyptus.
Poor light collecting

B. CONGO

STOP 288: RUANDA: 60 KM. W. ASTRIDA; 2400M; 11. XII. 57.

Steep hilly country with total = 60
endemic forest. The forest is dense
and tall. - and cool & damp. Rains.
Mostly roadside collecting.

STOP 289: RUANDA: 78 KM. W. ASTRIDA; 2350M; 11. XII. 57

Same as 288 total = 150

Very interesting forest. Tree heath in
some zones, epiphytic growth on the
forest on the Western slope, but none
on the Eastern. This zone is dense
with the trees and vines well covered
with moss in the shady parts.

STOP 290: B. CONGO (LWIRO) (BUKAVU) 1650M; DEC. 11/57.

Same as stop 197, + 106 total = 14.

STOP 291: B. CONGO: TSHIBATI (LWIRO), BUKAVU; 1950M;

DEC. 12/57. total = 150.

Same as stop 107.

" " " " DEC. 13/57.

Same as stop 107 total = 150

minor sweeping on roadside.

STOP 291

Dec. 14/57.

Sweeping and searching total = 800
under old logs.

STOP 291: B. CONGO: TSHIBATI (LWIRO); 32 MI. N. BUKAVU. 1950m;

DEC. 17/57. total = 300

STOP 291 " " " " DEC. 18/57. total = 250

Mostly empty in sunny spots on trails in thick forest. 1930m.

STOP 292: B. CONGO: BUNYAKIRI, KIVU DIST: 2200 m; DEC. 22/57.

Roadside stop. Same as stop 119. total = 17

STOP 293: CONGO: 39 Km. S. WALIKALE: KIVU DIST: 700m; DEC. 21/57.

(560)

Same as stop 119. total = 1500

Rain forest; Old F.I.S. CAMP.

STOP 293: CONGO: 39 Km. S. ^{WALIKALE} WALLEKALE: 700m; DEC. 22/57. total = 1000

Same.

STOP 293: CONGO _____ DEC. 23/57. total = 400

Same.

STOP 293: Congo _____ DEC. 24/57. total = 600

STOP 293: Congo _____ DEC. 25/57. total = 1000

STOP 293: B. CONGO: _____ DEC. 27 + 28/57. total = 600

STOP 294: B. CONGO: KABUNGA: 45 Km. S. WALIKALE: DEC. 29/57.

875m; total = 2810

Same type region as in Camp F.I.S., but with the ground more sandy & rocky, missing hills, steep slopes, dense rain forest. Original forest with dense undergrowth.

STOP 295: B. CONGO: IRANKE, I.R.J. N.C., 110 Km. N.W. KAVU: 700m;

Same as stop 117, but in DEC. 29/57. total = 28

in rainy season. Saw one *Papilio antiochus* flying (S) but unable to catch it. River flowing by was in the highest flood stage. Dense rain forest. Road stopping at edge of forest for *Chamaecyparis* spp.

STOP 291: B. CONGO: TSHIBATI, (LWIRO); 32 ^{MI} N. BUKAVU: 1960m;

see back at rest of DEC. 30/57. total = 50
Stop 291 Dec. 18, etc.

STOP 291: B. CONGO: TSHIBATI, (LWIRO); 32 MI. N. BUKAVU.

1950m; Jan 1-3, 1958 total = 400

STOP 291: B. CONGO: LWIRO, 32 MI. N. BUKAVU. 1650m; JAN. 4/58

on more grassy hills at the same total = 300
level as the Bukavu - Goma Road. Grassy slopes with small indigenous trees & eucalyptus.

STOP 291: B. CONGO: TSHIBATI (LWIRO); 32 MI. N. BUKAVU: 1950m;

Same as rest, except JAN. 4/58. total = 450
one above is at 1650 m;

STOP 296: B. CONGO: 12 MI. N. UVIRA: 920m; JAN. 5/58. total = 40
(174)

grassy savanna. rocky outcrops in spots. This is on the western slopes of the Albertine Rift, just before the road dips to the valley floor.

UVIRA READING = 186

URUNDI

STOP 297: URUNDI: USAMBURA: 800m; JAN 6/58 total = 5
in city of Usambara.

USAMBURA READING = 225

STOP 298: URUNDI: 30 MI. S. USAMBURA: 800m; JAN. 6/58
(255) Agricultural land on shores total = 125
(eastern) of Lake Tanganyika. This is
on the Usambara - Nyanza Road.

STOP 299: URUNDI: 6 MI. N. RUMONGE: 780m; JAN. 7/58 total = 200
(263) Savannah woods near lake shore. Rich dung
fauna here. All scarabaeids + sarcophagids
Taken from human feces. Recent rain.
Rumonge Reading = 269

STOP 300: URUNDI: 6 MI. S. RUMONGE: 800m; JAN. 7/58 total = 100
(275) Savannah woods on lake shore.
steep banks + hills.

STOP 301: URUNDI: 13 MI. N. NYANZA LAC.: 800m; JAN. 7/58
(286) Combination of savannah woods total = 40
and native agriculture. large alluvial
flat on lake shore. (several square miles).

STOP 302: URUNDI: 9 MI. N. NYANZA LAC.: 800m; JAN. 7/58
(290) Savannah woods on very steep total = 300
slopes. Recent rain.
Nyanza Lac Reading = 299

John W. McReynolds joined at STOP 309

STOP 303: URUNDI: 5 MI. E. NYANZA LAC.: 870m; JAN. 7/58
(304) Savannah woods. gentle total = 10
hills and slopes. This is on the Nyanza Road
to Bururi Road over the high mountains
above the Lake Tanganyika.

STOP 304: URUNDI: ¹⁹MI. S. BURURI: 1550m; JAN. 7/58
(334) Step hills with grass only. total = 125
All trees are introduced (eucalyptus + cypripedium)
Camped here.

STOP 305: URUNDI: 18 MI. S.E. BURURI: 1600m; JAN. 8/58 total = 100
335 hilly grasslands; the road is lined
with either eucalyptus or cypress. The
hills are absolutely barren except for grass.

STOP 306: URUNDI: 13 MI. S.E. BURURI: 1850m; JAN. 8/58 total = 50
(338) Same as 305

534 Bururi Reading = 353

STOP 307: URUNDI: 2 MI. W. BURURI: 1710m; JAN. 8/58 total = 50
(355) Mountain forest in Canyon. large tree
ferns in the undergrowth. Hills above are ^{greeny}

STOP 308: URUNDI: 16 MI. W. BURURI: 900m; JAN 8/58 total = 200
(369) DENSE savannah woods. Sandy-type soil
Tall trees, but not straight (Y shape) not (Y)
Camped here

STOP 309: B. CONGO: UVIRA: 800m; JAN. 10/58. total = ~~100~~ 30
Coll. mostly at the lights of the Hotel du Lac
in the town of Uvira.

In Shorter Rainy Season.

UVIRA READING = 446

STOP 310: B. CONGO: 26 MI. S. UVIRA: 800 M; JAN. 10/58. total = 100.

(472)

Small patch of the original forest near the lake's shores. Also banana plantations about.

Fiji Reading = 521

STOP 311: B. CONGO: 5 MI. S. FIZI: JAN. 10/58. 1320 M, total = 400

(526)

Dense savannah woods. deep green grass under the trees. Camped here.

STOP 312: B. CONGO: 13 MI. S. FIZI: 1300 M, JAN. 11/58. total = 225

(534)

Dense savannah woods; sandy soil: flora is different from stop 311. In some spots even vines are on trees, but undergrowth is abundant.

STOP 313: B. CONGO: 12 MI. S. LUAMA: (55 MI. S. FIZI) 850 M;

(581)

Somewhat an agriculture JAN. 11/58 total = 150
region, with some spots of the original dense forest (jungle-type) left in the deeper ravines. Sandy soil.

~~STOP 314~~

LUAMA READING = 569.

STOP 314: B. CONGO: 70 MI. N. ALB'VILLE: 40 MI. N. LUGOGO: 1150 M; JAN. 11/58

JAN. 11/58

(613)

Gallery forests on the west side of the western edge of the Albertine Rift. Camped here. total = 125

19 MI. N. LUGOGO: 40
STOP 315: B. CONGO: 52 MI. N. ALB'VILLE: 1200 M; JAN. 12/58
(635)

Remnant of gallery forest in a small creek. Mostly rounded out by African agriculture. total = 20

ALBERTVILLE = 683 out = 685

STOP 316: B. CONGO: 16 MI. S. W. ALB'VILLE: 1010 M; JAN. 12/58

(701)

Large creek with small waterfalls. Remnants of the gallery forest are left. Basically sandy soil. total = 100

STOP 317: B. CONGO: 45 MI. S. ALB'VILLE: 1350 M; JAN. 12/58

(730)

Low scrub with open savannah. Occasional gallery forest in the larger canyons. Appears to be eroded table land. total = 125

STOP 318: B. CONGO: 69 MI. S. ALBERTVILLE: 1320 M; JAN. 13/58

(756)

Creek; bushes + savannah; in this creek, there are palm trees; most creeks in the area have none. total = 200

STOP 319: B. CONGO: 47 MI. N. KAPONA: 1430 M; JAN. 13/58 total = 2.

(776)

Bush country - two lips at the roadside.

STOP 320: B. CONGO: 42 MI. N. KAPONA: 1520 M; JAN. 13/58

(781)

Manioc clearing in savannah woods. Deep grass + rain. Snake total = 350

STOP 321: B. CONGO: 27 MI. N. KAPONA: 1720 M; JAN. 13/58

(796)

Open bush country, with denser bush in creek canyons. total = 30

STOP 322: B. CONGO: 10 MI. N. KAPONA: 1770M; JAN. 13/58
(813)

Bush & savannah type country, total = 400
in hilly region. A few miles further
south, the region is open rolling grasslands.

KAPONA: 823

Make Corrections for labels
324-327.

STOP 323: B. CONGO: 10 MI. S. KAPONA: 1570M; JAN. 13/58

(833) Camped here. Combination total = 400

4 MI. OUT
FOR
DETOUR

bush & savannah (sparse) Large cattle
farm in the region: (Cobekkat)

STOP 324: 23 MI. S. K. A. PONA: 1650M; JAN. 14/58 total = 12

(850) Rolling, grassy hills. Small rocky outcrop.

STOP 325: B. CONGO: 27 MI. S. KAPONA: 1400M; JAN. 14/58 total = 125

(854) hilly (step) savannah woods: This is half
way down a steep hill that falls from 1600M
to 1200M; large cliffs in nearby creek canyon.

STOP 326: B. CONGO: 54 MI. S. KAPONA: 1380M; JAN. 14/58 total = 35

(881) burnt over savannah woods. Cloudy weather
and rain made collecting poor.

STOP 327: B. CONGO: 72 MI. S. KAPONA: KAPONA-PWETO RD:

(899) 1050M; JAN. 14/58 total = 125

V Camped here. Tall savannah woods: Light
collecting is poor, and so is general in daytime.

OR B. CONGO: 34 MI. N. PWETO at 1050M;

5101327
899 JAN. 14/58 total = 125

PWETO = 933

STOP 328: B. CONGO: LUVUA RIVER AT SOURCE: 800M; JAN. 15/58

Luvua River at its source total = 1
near Pweto. One vial of Tricops.

STOP 329: B. CONGO: 8 MI. S.W. PWETO: 1060M; JAN. 15/58

(941) Dry type savannah woods. total = 350

SANDY
Flat, sandy ground.

STOP 330: B. CONGO: 20 MI. S.W. PWETO: 1300M; JAN. 15/58

(953) Small CLEAR creek in total = 65

an area mostly agricultural. Sandy
soil. Savannah woods at a distance from
the road.

STOP 331: B. CONGO: 29 MI. S.W. PWETO: 1330M; JAN. 15/58

(962) Dry savannah woods. total = 210

Camped here. One snake in tree.
Rolling hills & sandy soil.

LUVANZA = 950

STOP 332: B. CONGO: 18 MI. W. LUVANZA: 1300M; JAN. 16/58 total = 105

(968) Savannah woods, dry, and much the same
as stop 331.

STOP 333: B. CONGO: 49 MI. E. KILEBA: KILEBA-LUVANZA RD:

(019) 1110M; JAN. 16/58. total = 125

Dry savannah woods, but drier and sparser
than stop 331 or 332: flatter ground with
a more clay like texture.

Kileba junction = 063

Muturaba = 078.

~~13.500~~

STOP 334: B. CONGO: 10 MI. W. MUTURABA: 1570 M; JAN. 16/58
(088)

Rolling, low hills covered with total = 175
grass and sparse brush: Camped here
This is on the road from Muturaba to
the Park ranger's headquarters for Parc de
l'Upemba.

STOP 335: B. CONGO: LUSINGA: Parc de l'Upemba: 1800 M; Jan. 17/58

This is the park headquarters. total = 200
Rolling hills mostly grassy, but with
occasional patches of brush.

STOP 336: B. CONGO: MUVE, Parc de l'Upemba. 1570 M; Jan. 17/58
Grassland + brush. at the first total = 140
slopes of the Muve River.

STOP 337: B. CONGO: MUNOWE; Park Upemba.; 1450 M; Jan. 18/58

A patch of dense forest in a total = 200
ravine coming down to the Rufira River.
The table land above is mostly grasslands.

STOP 338: B. CONGO: MUNOWE; Park Upemba. 750 M; Jan. 18/58

Savannah woods on the floor of the total = 100
broad valley of the Rufira River.

STOP 339: B. CONGO: Munowe, Park Upemba. 980 M; Jan. 18/58

A clear, flowing creek at the total = 40
base of the walls of the Rufira River Valley.
Small patch of almost jungle-like forest.

STOP 340: B. CONGO: Munowe, Park Upemba. 1300 M; Jan. 19/58

Camped here. Small creek flowing total = 450
by, has an almost gallery forest appearance.
Mostly, hilly land, rocky, and then with
thick scrub patches and savannah woods.

STOP 341: B. CONGO: LAKE UPEMBA, UPEMBA PARK; 700 M;

JAN. 19/58. total = 60

Coll. mainly between the Rufira River
and Lake Upemba. Grasslands + brush.

~~B. CONGO~~

STOP 342: B. CONGO: 3.2 MI. W. LUSINGA: Park Upemba.: 1450 M;

(176)

Jan. 20/58: total = 120

Grasslands on a plateau: bushes at
edge of plateau, but no savannah woods.
Sweeping + flower beating.

STOP 343: B. CONGO: 24 MI. W. LUSINGA: Park Upemba.: 870 M;

(184)

Jan. 20/58 total = 100

Rolling grasslands. Collected mostly
on some animal droppings in the
road. Precis type butterfly common on
the dung pikes.

LUSINGA = 208

SAMPWE = 253.

STOP 344: B. CONGO: 4 MI. S. ~~SAMPWE~~: 980 M; Jan. 20/58

(257)

total = 375

High grass savannah. flat ground + sandy
type soil. Camped here.

STOP 345: B. CONGO: 17 MI. S. SAMPWE; 1000 M; Jan. 21/58. ~~total~~ = 350
(270)

High grass savannah. Coll. mostly by sweeping and picking stuff off the grass

Mume Reading = 277.

STOP 346: B. CONGO: 69 MI. S. SAMPWE; 980 M; Jan 21/58. ~~total~~ = 350
(322)

High grass savannah. Camped here. This is also some 45 miles south of Mume and some 3 miles south of the Lufui River crossing.

STOP 347: B. CONGO: 13 MI. N. KIENGE; 980 M; JAN. 22/58. ~~total~~ = 50
(331)

Typical high-grass savannah, & somewhat denser growth ^{of trees} than usual. Flat sandy ground.

KIENGE Reading = 347.

STOP 348: B. CONGO: 1 MI. S. KIENGE; 980 M; JAN. 22/58. ~~total~~ = 25
(348)

High grass savannah. Very little undergrowth except the high grass. Lunched here.

STOP 349: B. CONGO: 27 MI. S. KIENGE; 1150 M; JAN. 22/58. ~~total~~ = 125
(374)

Hilly country, sandy-soiled and with the typical high grass savannah. The ground is most barren of leaf mould, and even the grass is thin and not growing in some spots.

Junction of the Elisabethville - Kasenga Road = 397

↓ - 13 miles for trip to Katofia for gas. (397-410)

STOP 350: B. CONGO: 39 MI. N.E. ELISABETHVILLE; 1225 M;
(425)

JAN. 22/58. ~~total~~ = 250

High-grass savannah. Camped here.

MCRENNOLAS LEFT AT E'VILLE.

ELISABETHVILLE. READING. = 462

E'VILLE = ELISABETHVILLE

~~B. CONGO: 50~~

STOP 351: B. CONGO: E'VILLE; 1280 M; JAN. 23/58. ~~total~~ = 350
350

Coll. mainly on the northern and north eastern outskirts of town. Small forest as most of the larger trees are cut out. Rain lightly each day. Sandy soil. Huge termite hills everywhere.

STOP 352: B. CONGO: AIRFIELD, E'VILLE; 1350 M; JAN. 26/58

at the airport of Sabena. ~~total~~ = 300
Camped in small grove of planted conifers. poor light collecting + night sweeping.

STOP 353: B. CONGO: 30 MI. S.E. JADOTVILLE; 1250 M; JAN. 27/58.

(418)

Region is grassy the same as ~~total~~ = 125
around Elisabethville, except for small rounded hills here. High grass savannah. sandy soil.

Jadotville = 648

Stop 354: B. CONGO: 7 MI. N.W. JADOTVILLE; 1350 M; JAN. 27/58.

Still like around E'ville. ~~total~~ 300
the altitude fluctuates between 1225 M and 1375 M; the umbrellas found here are the same as in E'ville, some are still in the same life zone. Camped here.

STOP 355: B. CONGO: 47 MI. E. KOLWEZI; 1380 m; JAN. 29/58

(733)

Momentary stop at roadside, total = 25
cut short by rains. Large Rock
pile and small stream; cleared
forest & sandy soil.

STOP 356: B. CONGO: 35 MI. E. KOLWEZI; 1500 m; JAN. 29/58

(745)

Some excellent collecting in total = 300
decaying Toadstools. Interesting type
of *Rasbitermes* here, black body and
brown head. Savannah woods. Sandy
soil. Rains. No cleared regions.

Kolwezi Reading = 780 in and 786 out

STOP 357: B. CONGO: 19 MI. W. KOLWEZI; 1320 m; JAN. 29/58.

(805)

Camped here. Heavily total = 75
disturbed savannah woods. Sandy bare
soil. Mining area.

STOP 358: B. CONGO: 43 miles N.W. KOLWEZI; 1100 m; JAN. 30/58 total = 300

(829)

Towards Kolwezi a few In the Kolwezi direction
from here, there are a few large flat, open grass-
lands. This is just at the edge of the endemic
savannah forest. Sandy bare soil.

Mutshatsha Reading = 880.

B. CONGO: 14 miles N.W. MUTSHATSHA; 1200 m; JAN. 30/58 total = 150

(894)

Camped here. Typical mostly of the region
around E'ville, except soil is sandier

high-grass savannah. Rather poor collecting.

This camp is 2 miles East of the Mukoleshi River King
Kasaji Reading = 960

STOP 360: B. CONGO: 12 MI. N. KASAJI; 1100 m; JAN. 31/58 total = 175

(972)

Area is all savannah woods. Except for
the odd different tree and some minor
changes in soil, this region would be
hard to describe as being different
from Elisabethville & vicinity.

N.B. All through the Katanga Region are
the House-sized termite hills.

STOP 361: B. CONGO: 28 MI. N. KASAJI; 1070 m; JAN. 31/58.

(989)

Same as stop 360, but a little total = 200
less disturbed. This is just a few miles
or so from the junction. We are about 1 1/2
miles from the junction on the road to Sandoa.
The other branch of the fork leads to Tshipa.

STOP 362: B. CONGO: 35 MI. S.E. SANDOOR; 1000 m; JAN. 31/58.

(1009)

Camped here. High grass savannah total = 35
rather tall trees for the average savannah
woods. Sandy soil. It will be noted
that there is most always very little humus
on this type of soil.

TSHIMBALANEN = 029 and is 23KM (14MI.) E. of Sanda.

STOP 363: B. CONGO: 19MI. E. SANDA: 950m; FEB. 1/58 ~~FEB~~ ^{total = 225}
(034) Branch creek (swamp mostly) of the Kachi-
leshi River. Collected at the edge of the swamp
in a grove of trees.

STOP 364: B. CONGO: 38MI. E. SANDA: 960m; FEB. 1/58 ^{E.} ~~FEB~~ ^{total = 100}
(553) Dense, savannah woods. Collected one "pulli"
eye "type of mantid here. Trees are tall; sandy
soil.
Kafakumba = 082 (on the Luo River)

STOP 365: B. CONGO: 24MI. E. KAFAKUMBA: 1050m; FEB. 1/58
100 Camped here High grass savannah ^{total = 30}
woods. Bamboos line the road. This is
between the Luo & Lushilok Rivers
sandy base soil. rather little humus.

STOP 366: B. CONGO: 54MI. W. KINDA: 1050m; FEB. 2/58 ^{total = 75}
(129) Area has burnt over at sometime; bracken is thick
in patches; tall trees and high grass; large
termite hills. red sandy soil.

STOP 367: B. CONGO: 32MI. W. KINDA: 1000m; FEB. 2/58 ^{total = 125}
(151) Mostly lipson dog dung and urine spots
at roadside; low trees mostly; white sandy
soil

STOP 368: B. CONGO: 12MI. W. KINDA: 980m; FEB. 2/58 ^{total = 50}
(171) Dung pile in road. Medium high trees. High grass
grey sandy soil.

KINDA = 183 Kinda is 49MI. S. KAMINA.

STOP 369: B. CONGO: LUABO: 30MI. S. KAMINA: 1080m;
(202) Reddish sandy soil. This is ^{total = 65}
not quite in Luabo, but on the main road
passing by. High trees & grass. Down
the road a bit was a patch of rain forest.

KAMINA = 232

STOP 370: B. CONGO: 33MI. E. KAMINA: KAMINABASE; 1120m;
(255) Low, sparse, scrubby savannah. ^{total = 50}
Camped here Reddish sandy soil.

STOP 371: B. CONGO: 18MI. N. KABONDO DIANDA: 900m; FEB. 3/58 ^{total = 100}
(280) Reddish sandy soil; tall trees mostly, and tall
grass. dense thickets in some spots.

KABONDO DIANDA: 299

STOP 372: B. CONGO: 21MI. N. BUKAMA: 750m; FEB. 3/58 ^{total = 250}
(311) hilly savannah woods. Rocky soil, somewhat
reddish. Some tall trees. This is on the south
pointing
face of a large valley.

BUKAMA = 332 Bukama is 6Kms. from the main
road. This is a junction and resting
was taken from there.

STOP 373: B. CONGO: 8MI. S. BUKAMA: 750m; FEB. 3/58 ^{total = 50}
(340) Camped here: open grassy spots. Usually sav-
annah woods, but thickets and tall trees in spots.

STOP 374: B. CONGO: 22 MI. N. LUBUDI; 1050m; FEB. 4/58 total = 75
(573)

Hilly country; rocky (boulder) outcrops. Basically a sandstone soil. Layer type sandstone in spots. Rainforest type plants in the creek canyons, but otherwise savannah woods.

LUBUDI = 395 in + 396 out

STOP 375: B. CONGO: 3 MI. E. LUBUDI; 1310m; FEB. 4/58 total = 50
(599)

Shale-type reddish sandstone; savannah woods. High grass. large termite mounds.

STOP 376: B. CONGO: 30 MI. N. N'GUBA; 1120m; FEB. 4/58 total = 20
(458)

Waterbolls taken from clear stream. Low but dense savannah woods & sandstone base soil with a flat; low hills.

STOP 377: B. CONGO: 19 MI. N. N'GUBA; 1110m; FEB. 4/58 total = 100
(469)

Savannah woods; tall trees; brown sand base. Camped here. Monkeys in trees & dendrocygna on ground. Natives catch the hyraxes in deadfalls.

STOP 378: B. CONGO:

N'Guba = 483

Chamelat (479) + 1100m;

STOP 378 B. CONGO: KAXONTWE CAVES, JADOTVILLE; 1250m;
FEB. 6/58 total = 200

Salomoni Cave; temperature of the water & the cave was 23°C. Coll. Cymicidae, Centipedes, millipede, etc. Limestone. found Curculionidae on rotting wood in cave.

NORTHERN RHODESIA

E'VILLE = 627

STOP 379: B. CONGO: 18 MI. W. TSHINSENDI; 1330m; FEB. 8/58 total = 125
(664)

Savannah woods. gold-coloured sand base soil. Beginnings of the rise for the Zambezi - Congo divide.

STOP 380: B. CONGO: 5 MI. W. TSHINSENDI; 1400m; FEB. 8/58
678:

Boulder outcrop at almost the summit of the divide; savannah woods. total = 100

The road at this point and for miles in both directions ~~may~~ is being newly made, so mileage figures here may be out.

TSHINSENDI REMAINING = 682

Northern Rhodesia

STOP 381: N. RHOD: 11 MI. N. CHINGOLA; 1330m; FEB. 8/58 total = 150
(690)

Savannah woods; mostly flat; cleared regions. Camped here; brown sand base.

CHINGOLA = 710

KITWE = 739

STOP 382: N. RHOD: 8 MI. S. W. NDOLA; 1310m; FEB. 9/58 total = 150
(766)

Savannah woods. tall trees. high grass. For the first time, a bit of leaf mould under the trees. Gold-coloured sand base.

NDOLA = 774 in and 775 out

33
STOP 383: N. RHOD: 5 MI. S.E. NDOLA: 1320m; FEB. 9/8 ^{total} = 3
(888) Sav. woods; heavy recent rain; red sand soil.
tall trees + grass.

STOP 384: N. RHOD: 5 MI. N. KAPIRI MPOSHI: 1320m; FEB. 9/8
(847) Savanna woods; man and at ^{total} = 100
large "Kopjes" or hilly outcrops that are
of boulders only. These are at least 250-
350 feet high. Probably granite.

KAPIRI MPOSHI = 852

STOP 385: N. RHOD: 3 MI. S. KAPIRI MPOSHI: 1300m; FEB. 9/8
(855) Camped here; gravel bare soil; ^{total} = 75
Sav. woods and grasslands. A few open grass
spots here + there. Rained most of night.

KAPIRI MPOSHI = 857

STOP 386: N. RHOD: 8 MI. N.E. KAPIRI MPOSHI: 1280m; FEB. 10/8
(865) Coll mostly under bark; Sav. woods ^{total} = 200
woods, tall trees + sparse grass in spots.
Area was heavily burned in past. gravel soil.

STOP 387: N. RHOD: 42 MI. S.W. KANONA: 1490m; FEB. 12/8
(969) Rained out here. gravel soil; hilly; ^{total} = 35
low savanna woods + tall grass. Coll. one bat.
KANONA = 011

STOP 388: N. RHOD: KANONA: 1580m; FEB. 12/8; ^{total} = 15
(911) Overnight at the Kanona Hotel; hilly country
savanna woods. Mining area for the night.

32
STOP 389: N. RHOD: 54 MI. N.E. KANONA: 1510m; FEB. 11/8
(043) Rocky outcrops a few yards from ^{total} = 225
the road; coll. under bark mostly. reddish
sand soil sav. woods + scrub. few brachystegia
MP/KR = 114 CHAMBEZI PONTON = 191

STOP 390: N. RHOD: CHAMBEZI PONTON, 54 MI. S. KASAMA: 1220m; FEB. 11/8 ^{total} = 250
(193) ²⁵⁰

Two miles back we crossed the Chambezi
River and the Chambezi Pontoon. The country
here is identical with there. Camped here
Savanna woods, fairly open with patches
of brush + dense savanna. low grass.

STOP 391: N. RHOD: 36 MI. S. KASAMA: 1220m; FEB. 12/8 ^{total} = 14.
(207) same type exactly as Stop 390. Laps on dung.
KASAMA = 243

STOP 392: N. RHOD: 11 MI. N. KASAMA: 1406m; FEB. 12/8 ^{total} = 175
(254) Sav. woods, flat ground with reddish sand.
a few tall trees; burnt over recently.
broken in spots.

10 MI. S. ROOPE. SENGH HILL
STOP 393: N. RHOD: 40 MI. S. KASAMA: 1580m; FEB. 12/8.
(301) Camped here. according to ^{total} = 300
calculations, we are 10 miles S. of Roopa.
and some 50 odd miles south of Abercorn.
This is apparently on the edge of the rift.
ABERCORN = 341 in + 343 out

STOP 394: N. RHOD: TANG-N. RHOD: BORDER; 22 MI. N.E.
(365) ABERCORN: 1830 m; FEB. 13/58 total = 15
Savannah woods, low, somewhat
open; hilly & rocky. No vials.

STOP 395: TANG: 59 MI. S.E. SUMBAWANGA: 1820 m;
(379) Vial this is on the FEB. 13/58 total = 25
road as it passes "Erwin Farm." Accord-
ing to calculations this is on the old
Abercorn-Sumbawanga Rd. Low,
rolling hills at edge of the Lyangalile
District.

STOP 396: TANG: 43 MI. S.E. SUMBAWANGA: 1530 m;
(395) Vial; valley; FEB. 13/58 total = 50
mostly grassy; few large trees. This
is mostly an agricultural region. Burnt
over.

STOP 397: TANG: 36 MI. S.E. SUMBAWANGA: 1590 m;
(400) No vial FEB. 13/58 total = 175
Camped here: at base of hills on the
way to S'wanga. Open savannah; mostly
low trees. brown sand base.

STOP 398: TANG: 25 MI. S.E. SUMBAWANGA: 1980 m; FEB. 14/58
(409) Vial; open savannah; grasslands total = 40
on rolling hills; brown sand base.

STOP 399: TANG: 16 MI. S.E. SUMBAWANGA: 2040 m; FEB. 14/58.
(418) Vial; open savannah in total = 125
valley hilltop. grazing; rolling hills
brown sand base.

N. RHOD

SUMBAWANGA = 434 in & 435 out.

STOP 400: TANG: MBISI FOREST, 11 MI. N.E. SUMBAWANGA:
(445) 2180 m; FEB. 14/58. total = 240

Mountain forest with large Euphorbias.
Camped here; 55°F - but very penetrating
wind. Cloudy - no sun. Dense undergrowth.

STOP 401: TANG: 14 MI. S. SUMBAWANGA: 1750 m; FEB. 16/58
(471) Small patch of savannah woods total = 200.
in large valley that is now mostly
agricultural. brown sand base.

STOP 402: TANG: 39 MI. S. SUMBAWANGA: 1700 m; FEB. 16/58
(496) lips on urine spots. Originally total = 12.
Savannah but now mostly agriculture

TATANDA
STOP 403: TANG: 43 MI. S. SUMBAWANGA: 1750 m; FEB. 16/58
(500) this is at Tatanda, the Living- total = 100
stone memorial mission; Rock &
boulder covered hillsides; savannah
woods; brown sand soil

N. RHODESIA

STOP 404: N. RHOD: ABERCORN: 1600 m; FEB. 16/58
(528) Camped here. Campgrounds total = 400
near small lake. O.K. for swimming.
Much sweeping in grass.

TANGANIKA STOPS.

Special note for the stops near

STOPS ~~494-5~~ 394-400.

errors in layers & ~~at~~ alcohol
vials read STOPS 494-499

Please note for correction:

road as per "Erwin Farm." According to calculations this is on the old Abercorn-Sumbawanga Rd. Low, rolling hills at edge of the Lyangalile District.

STOP 396: TANG: 43 MI. S.E. SUMBAWANGA: 1530 m;

(395) 1 vial; valley; FEB. 13/58 total = 50 mostly grassy; few large trees. this is mostly agricultural region. Burnt grass.

STOP 397: TANG: 36 MI. S.E. SUMBAWANGA: 1590 m;

(400) Howl No vial FEB. 13/58 total = 175 Camped here: at base of hills on the way to Siwanga. Open savannah; mostly low trees. brown sand base.

STOP 398: TANG: 25 MI. S.E. SUMBAWANGA: 1980 m; FEB. 14/58

(409) 1 vial; open savannah; grasslands total = 40 on rolling hills; brown sand base.

STOP 399: TANG: 16 MI. S.E. SUMBAWANGA: 2040 m; FEB. 14/58.

(418) 1 vial; open savannah in valley hilltop. grazing, acacia; rolling hills brown sand base.

N. RHOD

SUMBAWANGA = 434 in + 435 out.

STOP 400: TANG: MBISI FOREST, 11 MI. N.E. SUMBAWANGA:

(445)

2180 m; FEB. 14/58. total = 290

Mountain forest with large Euphorbias.

Camped here; 55°F - but very penetrating wind. cloudy - no sun. Dense undergrowth.

STOP 401: TANG: 14 MI. S. SUMBAWANGA: 1750 m; FEB. 16/58

(471)

Small patch of savannah woods total = 200. in large valley that is now mostly agricultural. brown sand base.

STOP 402: TANG: 39 MI. S. SUMBAWANGA: 1700 m; FEB. 16/58

(496)

lips on worm spots. Originally total = 12. savannah but now mostly agriculture

TATANDA

STOP 403: TANG: 43 MI. S. SUMBAWANGA: 1750 m; FEB. 16/58

(500)

this is at Tatanda, the Living-stone Memorial mission; Rock & boulder covered hillsides; savannah woods; brown sand soil

N. RHODESIA

STOP 404: N. RHOD: ABERCORN: 1600 m; FEB. 16/58

(528)

Camped here. Campgrounds total = 400 near small lake. O.K. for swimming. Much sweeping in grass.

N. RHODESIA

+ NYASALAND

STOP 405: N. RHOD: KALAMBO FALLS; 22 MI. N.W. ABERCORN.

1200m; FEB. 18/58 total = 125

Kalambo falls, the 3rd highest in the world. Savanna woods + some scrub. Collected some things, *Ascariphila* + termites in some large termitaria. rest - general collecting

* Abercorn = 581

TUNDUMA = 694

STOP 406: N. RHOD: 15 MI. S.E. TUNDUMA; 1450m; FEB. 19/58
(709)

Tunduma is on the Great North total = 125 Road at the Tanganyika - N. Rhodesia border. We are now on the main road from Tunduma to Blantyre. Savanna woods; hilly. brown sand soil.

STOP 407: N. RHOD: 35 MI. S.E. TUNDUMA; 1400m; FEB. 19/58 total = 150
(729)

Camped here. Reasonably flat ground with "pans" being common. Much of this area is now being farmed by Africans. Savanna woods. Caught a cobra here under a log.

STOP 40 Fort Hill = 748

STOP 408 NYASA: 13 MI. S.E. FORT HILL; 1310m; FEB. 20/58

(761)

Large valley; one of the best stops total = 100 we have hit yet - entomologically. Savanna woods. About 1/4 mile from Chipangapanga or Chichipanga Bridge/creek. brown sand soil.

N. RHODESIA + NYASALAND

CHISENGA = 772 not on map, but here there is a rest house and radio transmitter.

STOP 409: NYASA: 31 MI. S.E. FORT HILL; 1600m; FEB. 20/58
(779)

This stop is also 9 miles S. of total = 100 Chisenga, and about 1-2 miles before the drop into the valley. hilly and with low dense savanna or scrub. reddish soil.

STOP 410: N. RHOD: 17 MI. N. MUYOMBE; 1500m; FEB. 20/58

(804)

Just at edge of long, slow drop total = 125 to Muyombe; savanna woods - hilly; brown sand soil.

MUYOMBE, N. RHOD. = 821

NYASALAND

KATUMBI = 847

STOP 411: NYASA: 4 MI. E. KATUMBI; 1460m; FEB. 20/58
(851)

Camped here; mostly light coll. total = 100 From Katumbi you climb quickly. This is at the Tunduma - NYIKA - NJAKWA jct. Rained half the night very hard, but was a drizzle by morn.

STOP 412: NYASA: 13 MI. W. NJAKWA; 1100m; FEB. 21/58 total = 50

(868)

Large flat valley. 2nd growth thickets + brush.

NJAKWA = 881

NJAKWA = 881

STOP 413: NYASHA: 6 MI. S. NJAKWA: 1100m; FEB. 21/58.

(887) Savannah woods mingled with total = 140
bush and euphorbias. brown sand base

STOP 414: NYASHA: 6 MI. N. EKWENDINI; 1200m; FEB. 21/58

(900) Atop the ridge after crossing total = 150
the Kasitu River; edge of a plateau; rocks.
savannah woods.

EKWENDINI = 926.

STOP 415: NYASHA: 15 MI. N.W. NKATA BAY; 590m; FEB. 22/58

(943) This is on the long slow slope total = 40
after you have come out of the hills.
Camped here; burnt over; regrowth; &
savannah woods. heavy agriculture.

NKATA BAY = 954

STOP 416: NYASHA: MKUNAZI HILL FOREST; 11 MI. S. NKATA BAY.

590m; FEB 22/58. total = 350
dense, lowland forest. No sun; heavy clouds
so gen. coll. was poor.

EKWENDINI = 818

STOP 417: NYASHA: 12 MI. S.W. EKWENDINI; 1230m; FEB 22/58

(1030) Camped here: brushy sav. total = 75
or savannah scrub. about 2 miles from
the Kasitu River.

STOP 418: NYASHA: 41 MI. N. MZIMBA: 1360m; FEB. 23/58 total = 200

(047) Thornless acacia abundant. Mostly rather
scrubby savannah woods. Gravel in spots. here
is brown sand base.

STOP 419: NYASHA: 10 MI. N. MZIMBA: 1610m; FEB. 23/58 total = 200

(078) Scrubby sav. Few tall trees & some large,
hill-like termite hills. gravel in spots, and
here reddish sand soil.

MZIMBA: 088

← make corr. on labels + miles

STOP 420: NYASHA: 15 MI. N. KASUNGU: 1100m; FEB. 23/58 total = 70

(161) Camped here. Regular savannah woods,
with trees tall and well-spaced. In spots
the agriculture is heavy. This is the calculated
distance from Kasungu. tall grass also.

Kasungu = 180

Lilongwe = 256

STOP 421: NYASHA: 16 MI. W. DEDZA: 1380m; FEB 24/58 total = 200

(300) High grass sav. woods. well-spaced trees
boulder outcrops occasionally; large valley.

DEDZA = 316

STOP 422: NYASHA: 21 MI. S.E. DEDZA: 1450m; FEB. 24/58 total = 122

(337) Camped here. Largely agricultural area.
Much low scrub, probably second growth

NCHEU = 357

STOP 423: NYASA: 9 MI. S.E. NCHEU; 880m; FEB. 25/58 total = 30

(366) Fairly large creek; tall endemic trees. Momentary stop.

STOP 424: NYASA: 53 MI. N. BLANTYRE; 630m; FEB. 25/58 total = 100

(392) Savannah woods; gravel and sand soil. tall trees and grass. A few miles south of here the baobab trees begin. Some 20 miles S. of here is the village Matope at the Shire River crossing ^{at (411)}

BLANTYRE Blantyre; 445 in + 446 out.

Chiroro Cholo + jet = 470

STOP 425: NYASA: 7 MI. S. CHOLO; 940m; FEB. 25/58 total = 100

(477) A few miles south of the mission here; and also a few miles from the extensive tea plantation. Camped here; the Shire river can be seen below & to the left. Heavy agriculture region with endemic trees left only in the tight valleys.

STOP 426: NYASA: 4 MI. N. CHIROMO; 250m; FEB. 26/58 total = 25

(509) Sav. woods. hilly; gravelly soil; tall trees. well-spaced and tall grass in spots; heavy agriculture;

STOP 427: NYASA: CHIROMO; 100m; FEB. 26/58 total = 150.

(520) This is at the region around the Agricultural Research station at Chiroro. Excellent sweep-net coll. Sav. woods + dense bush in spots.

BLANTYRE = 596

STOP 428: NYASA: SHIRE RIV; BLANTYRE-NCHEU RD.

(626) Camped here 550m; FEB. 27/58 total = 50

The Shire (pron-Sheeray) River is about a 1/2 mile away. In flood / or high water right now. Well-spaced sav. woods. Flat ground with only 1 hill in sight. This is quite near the River bridge. Matope airport near here.

STOP 429: NYASA: 39 MI. N. BLANTYRE; 580m; FEB. 28/58 total = 100

(635) Savannah woods with occasional baobab trees. High grass & dense bush in spots.

LILONGWE = 781

STOP 430: NYASA: 31 MI. W. LILONGWE; 1150m; FEB. 28/58 total = 25

812 Camped here: poor collecting in sweeping + light. Heavy rains in early evening and night. Small patches of savannah woods (second growth) in a heavy agriculture region. All trees show signs of heavy burning at some time.

STOP 431: NYASA: 8 MI. E. FT. MANNING; 1120m; MAR. 1/58 total = 50

(839) Same type region as Camp, except for fewer farms and more hills. Brown sand soil.

FORT MANNING = 847.

N. RHODESIA

FORT JAMESON = 867

STOP 432: N. RHOD: 39 MI. S. FT. JAMESON: 1150m; MAR. 1/8

(906) Savanna woods; tall trees and total = 125
grass. Low, rolling hills; brown sand soil.

KATETE = 912

1 Cricket at (950) + 1150m;

MININGA = 982

NYIMBA = 012

STOP 433: N. RHOD: 44 MI. S. W. NYIMBA: 510m; MAR. 1/8

(956) Camped here. River canyon total = 25
sandy soil; sav. woods + tall grass.
Heavy rains.

LUANGWA at BEIT BRIDGE = 075

STOP 434: N. RHOD: 12 MI. E. RUFUNSA: 1060m; MAR. 2/8. total = 200

(108) hilly region; tall trees + grass. Mostly sandy,
but some flagstone outcrops; white sand.
just a few miles before the drop to 800m;

RUFUNSA (FLY BARRIER) = 120

STOP 435: N. RHOD: 38 MI. N.E. LUSAKA: 1150m; MAR. 2/8

(185) Camped here: sav. woods with total = 130
tall trees + grass. In some low, depression
to areas, there are meadow swamps with
no trees. Brown sand soil.

LUSAKA = 216 in + 230 out.

STOP 436: N. RHOD: 6 MI. N. KAFUE; 1050m; MAR. 4/8 total = 250

(253) a few rocky hills - mostly boulders. Meadows
in the places between the hills. Sav. type trees.

KAFUE = 259 1 scorpion at (296) + 1100m;

MAZABUKA = 306

STOP 437: N. RHOD: 14 MI. S. MAZABUKA: 1050m; MAR. 4/8

(320) On bark of large tree. 1 Ascalaphid total = 6
+ 5 alleculid-type beetles. Agricultural area.
large creek nearby. open grasslands in spots.

MONZE 341

STOP 438: N. RHOD: 4 MI. E. PEMBA: 1250m; MAR. 4/8 total = 150

(360) Camped here. This is computed distance from Pemba
Thick sav. woods. several large termite hills
around. brown sand soil. low grass mostly.

PEMBA = 562

STOP 439: N. RHOD: 15 MI. S. PEMBA: 1270m; MAR. 5/8 total = 300

(377) Euphorbias + large termite hills present.
same old sav. woods with thick brush spots.

BATUKA = 382 CHOMA = 399

ZIMBA = 465

21 MBH = 465

STOP 440: N. RHOD: 24 MI. N. LIVINGSTONE; 1180m; MAR. 5/58

(486)

Sav. woods. few large trees total = 200
over 100' high. Near a tobacco plantation
high grass everywhere. A few cut trees
provide excellent catches of *Cerambycidae*
Camped here *Suppressed*

LIVINGSTONE = 510

STOP 441: N. RHOD: LIVINGSTONE; 900m; MAR 6/58 total = 75

Collected in the areas between the falls
and Livingstone town. Camped here
at the "tent site" near the falls. River in
very high flood.

MAZAMBUKA = 727

STOP 442: N. RHOD: 33 MI. E. MAZAMBUKA; 1180m; MAR. 7/58 total = 75

(760)

Camped here; on the set of the low hills about
10 miles from the Kafue River; this is on the
Kafue - Mazambuka Rd.

STOP 443: N. RHOD: KAFUE; 960m; MAR. 8/58 total = 100

(777)

Coll. in the Kafue Town and also up
on some of the local hills. Very open
savannah; high grass; few rocky outcrops.

CHIRUNDU - OTTO BEIT BRIDGE = 831

SOUTHERN RHODESIA.

STOP 444: S. RHOD: 17 MI. S.E. BEIT BRIDGE; 520m; MAR 8/58

(848)

In Zambezi R. Valley. sandy total = 150
soil - reddish. baobab trees, tall grass &
in spots bush thickets: just a few miles
before the Zambezi Escarpment.

STOP 445: S. RHOD: 25 MI. S.E. BEIT BRIDGE; 880m; MAR 8/58

(858)

At the top of the Zambezi Escarp- total = 100
ment. hilly, rocky & with Sav. woods - low.
New road going through, so distances
after the escarpment are computed for
the new road coming in.

STOP 446: S. RHOD: 33 MI. S.E. BEIT BRIDGE; 1120m; MAR. 8/58

(865)

Camped here. Hilly and total = 150
gravelly; rock outcrops in spots. Campsite
is near the old road. tall grass & low trees.

KAROI = 917

S. RHOD:
STOP 447: ~~KAROI~~ KAROI; 1220m; MAR. 9/58 total = 50

(918)

By the small lake near Karoi; savannah
woods, tall grass, & gravelly soil.

STOP 448: 24 MI. S. RHOD: 26 MI. N.W. SINDIA; 1150m; MAR. 9/58

(943)

rocky hills - strewn with boulders. total = 250
hilly savannah woods.

SINDIA = 969

STOP 449: S. RHOD: SINDIA CAVES; 1200m; MAR. 9/58

(964)

Some coll. in caves, a little total = 50
outside; Caves damp & muddy at this time
of year.

Banket = 798 Darwendale = 007

STOP 450: S. RHOD: 3 MI. E. DARWENDALE; 1320m; MAR. 9/58

(010)

Camped here. This area is total = 40

geologically known as "the Bank".

Sav. woods, meadows + low hills.

SALISBURY = 045 in + (096) out.

STOP 451: S. RHOD: SALISBURY; 1475m; MAR. 10/58 total =

(045)

Collected both at the Camping grounds in
Coronation Park + also at the Agric. Service
Dept. in the city.

STOP 452: 7 MI. W. MARANDELLAS; 1570m; MAR. 12/58 total = 20

(131)

large boulders; on one boulder there are some
ancient drawings; few farms. few trees.

Marandellas (137)

STOP 453: S. RHOD: 11 MI. E. MARANDELLAS; 1600m; MAR. 12/58

(148)

"Kopje" at roadside; a "kopje" total = 100

is a little hill, usually of rocks. Found an
ancient fortress of stones here. woodland sav.

Rusape = (194) Inyazura = (206)

STOP 454: ~~S. RHOD~~ S. RHOD: 15 MI. S. RUJAPPE; 1200m; MAR. 12/58

(209)

Camped here; tall grass; ~~meadows~~ total = 40
woodlands + "kopjes"

MOZAMBIQUE

STOP 455: S. RHOD: UMTALI HEIGHTS; 1420m; MAR. 13/58 total = 175

Umtali Heights is on the road to Salisbury and
is some four miles from the town of Umtali.
Rocks + boulders in spots. sparse woodlands.

Umtali = (249) in + (251) out

Portuguese Customs at 257

Mozambique

VILA MANICA = (269)

STOP 456: MOZAM; 27 MI. E. VILA MANICA; 700m; MAR. 13/58

(286)

Camped here lowland woodlands. total = 250
tall grass. This is just a few miles beyond
what we think is the Ruwe River.

STOP 457: MOZAM; VANDOZI, 21 MI. W. VILAPERY; 700m; MAR. 14/58

(296)

Patch of forest. No grass undergrowth. total = 100

Large trees. Creek at base of hill and also
much agriculture - some citrus trees. Tried
some sifting - poor results.

Vila Pery = (317) Gondola = (331)

STOP 458: MOZAM: 11 MI. E. GONDOLA; 480m; MAR. 14/58 total = 4

(342)

Patch of true lowland forest. Tall trees, dense,
covered with vines; no grass undergrowth.

STOP 459: MOZAM; 6 MI. E. VILA MACHADO; 80m; MAR. 14/58

(380)

Flat land; covered in spots by total = 30
low, scrubby trees. meadows in spots.

S. Rhodesia

TURN AROUND = (358) = Km. 75 from Beira.

VILA MACHADO = (402)

STOP 460: MOZAM; 10 MI. W. VILA MACHADO; 220m; MAR. 19/8
(412)

Camped here; Going west, on the total = 250
left hand side of the road are two or so
promontories. Camped at the base of the ~~the~~ ^{the} ~~the~~
Woodlands; tall trees and grass. Monkeys
abound in the trees

STOP 461: S. RHOD: UMTALI HEIGHTS; 1300m; MAR. 15/8

Campgrounds; Camped here total = 250
Same type area as STOP 455.

~~STOP~~ Camped here for two nights

STOP 462: S. RHOD: FOREST RES, VUMBA; 1650m; MAR. 16/8

Endemic hill top forest; at this time total = 50
of year it is wet, cool + gloomy - no sun and
plenty of heavy mist

Umtali = 574

STOP 463: S. RHOD: ^{41 MI. S. UMTALI} ~~25 MI. S. UMTALI~~ BIRCHENOUGH BRIDGE; 690m; MAR. 17/8

~~STOP~~ (615) Camped here; General collecting total = 100
during daylight hours was poor, but light ~~all~~
was fair. This spot is about 8 miles North
of a small town named "Hot Springs".
many thorny bushes + many stickers. The Sabie
River is to the West about 1 mile.

Hot Springs = 624

STOP 464: S. RHOD: 4 MI. S. HOTSPRINGS; 54 MI. S. UMTALI; 560m;
(628)

Bush + woodlands MAR. 18/8 total = 150
country. Many cow trails in bush. sandy
soil with boulders scattered on the
surface.

CHIPINGA = 679

STOP 465: S. RHOD: CHIRINDA FOREST, 13 MI. S. CHIPINGA; 1110m;

697 Camped here; MAR 18/8 total = 250

Heavy + dense forest; in spots are hanging
vines; no grass undergrowth. In the ~~area~~ ^{area}
this location is called "Mt. Siliinda".
This is not correct, but only a corruption of "Chirinda".

STOP 466: S. RHOD: 12 MI. S. CHIPINGA; 970m; MAR. 19/8 total = 200

(710) Woodland sav.; low grass + spaced trees. brown
sand-base soil; this spot reminds one of the Katanga
in the Congo.

CHIPINGA = 722

STOP 467: S. RHOD: 18 MI. N.W. CHIPINGA; 800m; MAR. 19/8 total = 50

(740) This is a 1/2 mile or so from the "Three Berg Pass".
and is on the Chipinga-Birchenough Bridge Road.
Hilly woodlands + rocky outcrops.

Birchenough Bridge = 760 Clan Clova (Bikita Mines) = 822

STOP 468: S. RHOD: BIKITA MINES; 1200m; MAR. 19/8 total = 75

(822) Camped here; Clan Clova or Bikita mines
Woodlands + Korfes; Birch'gh Bridge - Ft. Victoria Road.

STOP 469: S. RHOD: 17 MI. N. ^E 21 MBABWE; 1050m; MAR. 20/58
(848)

Woodlands; kopjes and rocky slopes. "Kopjes" & "pron. kopays") are hills, usually small, composed most entirely of rocks + huge ~~boulders~~ boulders. Some kopjes may be 2-300 feet high, though.

Zimbabwe = 865

STOP 470: S. RHOD: ZIMBABWE; 1100m; MAR. 20/58

Camped here in the provided grounds. total = 75
Woodlands and kopjes. The country here is fairly open ^(flat) and with large, well-spaced ^{kopjes}.

FL. VICTORIA = 883

STOP 471: S. RHOD: 4 MI. W. FL. VICTORIA; 1050m; MAR. 21/58 total = 150
(897)

Rocky hills (kopjes): a cattle dip is the big issue here and only one for miles. Grass is low as it has been well chewed off. Open woodlands.

Mashaba = (907) Shabani = (944)

STOP 472: S. RHOD: 10 MI. S.W. SHABANI; 1050m; MAR. 21/58 total = 150
(951)

Dry woodlands: hilly; small boulders on the surface; reddish sand base soil; in a few miles from here, the country opens up into a broad flat expanse.

STOP 473: ~~21 MI. N. E. KILABUSI~~ S. RHOD:

786 S. RHOD: 10 MI. N. E. KILABUSI; 1100m; MAR. 21/58 total

Camped here; woodlands; granite outcrops on the surface. Open + flat country in spots; just past the first hills after crossing the ~~expanses~~ of a valley.

Filabusi = 996. Balla Balla = 013

STOP 474: S. RHOD: 2 MI. N.W. BALLA BALLA; 1100m; MAR. 22/58 total = 100

(015) Large, granite hills; loose rocks on surface. open savannah woodlands.

Bulawayo = 054

STOP 475: S. RHOD: ~~KHAMI~~ ^{KHAMI} RUINS, 14 MI. W. BULAWAYO; 1275m; MAR. 22/58 total = 125

(-) In the area of the Khami Dam + Khami Ruins; kopjes are numerous + small. Few very large trees. Brown sand soil. sav. woodlands. Camp
Bulawayo = approx (085)

STOP 476: S. RHOD: MATOPOS MISSION, GWANDA-BULAWAYO RD:

(119)

1400m; 23. III. 58 total = 65

Large granite boulders; kopjes. in flat areas are woodland sav + heavy agriculture.

The mission is about 2 miles back towards Bulawayo.

GULUBANE ^{HWE} Cliff Paintings (125) + 1250m;

STOP 477: S. RHOD: ~~0650~~ ^{OLD GWANDA} RD: 14 ¹⁴ MI. N.W. GWANDA; 1050m; 23 March/58 total = 100
(141)

Camped here. Woodland savannah + large granite kopjes.

U. of S. Africa

Gwanda = 155

STOP 478 S. RHOD: 16 MI. S. E. GWANDA: 900m; 24/III/58 total = 25
(1171) rocky hills high grass; + bush few green spots

STOP 479: S. RHOD: 14 MI. S. W. GWANDA: 600m; 24/III/58 total = 35
(235) much low, dry grass; low bush; few rocks

STOP 480: S. RHOD: 14 MI. N. W. BEIT BRIDGE: 540m; 24/III/58
(254) thick low bush; few rocky kopjes. total = 125

Beit Bridge (268) Union of South Africa

TRANS:
STOP 481: 2 MI. N. MESSINA: 590m; 24/III/58 total = 200
(275) Camped here: one large granite kopje, the only one this size for miles: dry grass + low bush.

Louis Messina = (278)

STOP 482: TRANS: 21 MI. S. MESSINA: 660m; 25/III/58 total = 400
(298) Grass, woodlands + bush. Few good spots where pits have been dug at roadside and water farm there. good tiger beetle + Water beetle coll. Flats area and red sand.

STOP 483: TRANS: 11 MI. N. LOUIS TRICHARDT: 800m; 25/III/58
(315) at the N. base of the Zoutpanberg mts. total = 200 and also beginning of Wylies Port. rocky; bush + green grass

³²⁶
Louis Trichardt = (334) app. + comp

STOP 484: TRANS: 18 MI. S. LOUIS TRICHARDT: 1000m; 25/III/58 total = 125
(344) Camped here: mostly pasturage. but few + far between kopjes. Cool + heavy overcast weather. at the "Ress Farm". Euphorbia trees.

STOP 485: TRANS: DWARS RIVIER: 25 MI. S. LOUIS TRICHARDT: 1000m; 26/III/58 total = 500
(361) Euphorbia trees + granite kopjes. Low bush + in distance, grassland. Good stone collecting + mammo also.

Pietersburg = (396)

STOP 486: TRANS: 10 MI. E. PIETERS BORG: 1200m; 26/III/58 total = 75
(406) Cacti; the only rocky kopje around that is made of soapstone. Poor spot all around. in distance + in valleys are euphorbs, but not here.

Boyne = (418)

STOP 487: TRANS: 2 MI. N. E. BOYNE: 1150m; 26/III/58 total = 75
(420) Camped here: steep rocky hills covered with euphorbs, low bush, + thorny, + loose boulders. T3 area - Pietersburg road.

STOP 488: TRANS: 12 MI. W. TZANEEN: 1250m; 27/III/58 total = 65
(437) Small patches of endemic forests amongst groves of planted pine + gums. Steep hills; no grass under trees; mines.

TZANEEN = (452)

LEYDSOORP = 481

STOP 489: TRANS: LEYDSOORP: 580m; 27/II/58. total = 40
(481)

Kopje composed mostly of rounded granite boulders. low bush & tall grass. about 1 mile from the town, to the east.

GRAVELOTTE = (487)

STOP 490: TRANS: 6 MI. N. OLIFANTS R., ^{OR} 17 MI. S. E. GRAVELOTTE.
(504) 425m; 27/III/58 total = 50

One of several kopjes just before the drop to the Olifants River. Bush; gravel; boulders on the kopjes.

Olifants River = (510)

STOP 491: TRANS: 25 MI. S. E. GRAVELOTTE: 360m;
(512) Camped here 27.III.58 total = 50

low bush & high grass - dry. few rocks on surface. This is on the south side of the Olifants River.

Acornhoek = 560

STOP 492: TRANS: KLASERIE: 600m; 28 MAR/58. total = 75

Klaserie is about 5 miles N. of Acornhoek, which is W. of the Kruger park. Specifically the Fleur de lys farm owned by the Mathes. Low scrub area in a citrus farm. St. yet 2 nights here.

STOP 493: TRANS: DRAKENBERG MTS; 12 MI. W. KLASERIE.

Small patches of 1275m; MAR 29/58 total = 200
endemic forest amongst thick, planted groves of pines. the endemic sections are the same as the forests near + above Zameen.

STOP 494: TRANS: DRAKENBERG MTS; 8 MI. W. KLASERIE.

at a ridge on the 1000m; 29/III/58. total 100
falling face you come into a large valley that drops to 300m; went down part way. Some patches of endemic forest, but lower down.

STOP 495: TRANS: GRASSKOP: 1375m; MAR. 30/58 total = 30
(652)

Just at the top of the Drakensberg Escarpment. Few rocks, in deep, on surface. Grassy slopes. Did mostly sweeping.

GRASSKOP = (653) Sabie = (670)

STOP 496: TRANS: 10 MI. E. LYDENBURG: 2000m; 30/III/58 total = 60
(692)

This is at the top of the "Long Tom Pass" between Sabie + Lydenburg. Grassy slopes: few rocks on surface here. Caught beautiful + strange lizard here. 1 foot long.

LYDENBURG = (702)

STOP 497: TRANS: 20 MI. N. E. DULLSTROOM; 1500m; 30/III/58 total = 2
(719)

Quick stop - flat stones on grassy hill. NO endemic remnants of trees. On the Dullstroom Lydenburg road.

Dullstroom = (739)

STOP 498: TRANS: 13 MI. N.E. DULLSTROOM; 1500m; 30/IV/58 total = 50

(726) Smaller creek in grassy, rolling hills: few rocks on surface in spots. Small bush here planted pine forests few hundred yards away.
Belfast = 756 Middleburg = 793

STOP 499: TRANS: MIDDLEBURG: 1400m; 30/IV/58 total = 50

(793) In a large Eucalyptus forest at the west end of town. Camped here. Flat, sandy soil.

WITBANK = (812)

STOP 500: TRANS: 12 MI. W. WITBANK; 1350m; 31/III/58 total = 25

(824) Rolling, grassy hills; in this spot there are rocks on the surface. Scattered in many places are eucalyptus + pine trees.

PRETORIA = (873) in + (900) out

STOP 501: TRANS: PRETORIA: 1320m; 1.IV.58 total = 35

Few moths at night light; mostly under-stones, work; Camped here for 3 nights at the Pretoria Camping grounds.

Grease job + wheel bearing repacked + oil added at Delmas = 12,941.

NATAL STOP 503

PIET RETIEF = (098)

STOP 502: TRANS: ~~47~~ MI. W. PONGOLA: 550m; 3.IV.58

(141) Camped here; river canyon total = 500 or valley. Higher hills are rolling, grassy hills; but in this valley are some remnants of ^{low} scrub + bush. In spots are euphorbias.

PONGOLA = 156

NATAL

Candover = 185 Ubombo = 201

STOP 503: NATAL: 3 MI. N. UBOMBO: 460m; 4/IV/58 total = 25

(204) At edge of high hills on which Ubombo is situated: eastern face; few rocks on surface - open bush.

STOP 504: NATAL: 10 MI. N. UBOMBO: 160m; 4/APRIL/58 total = 700

(211) Camped here: Coastal plain. low, flat hills or rises. Open + dense bush; rocks numerous on surface. Scattered euphorbias. Good collecting on flowering acacias. Did a few minutes collecting at the Pongola River on the road between Ubombo + Otobotini

figure 10 miles off speedometer readings for trip to Pongola River. on next reading at Sordwana Stage

STOP 505: NATAL: SORDWANA BAY, 50 MI. E. UBOMBO: SEA LEVEL.

(261)

April 5/58. total = 125

Did some Hydrophilid coll in the stream (fresh water) and some floating wood & paper. Tenebrs + weevils abundant in the sand in the road. Lots of dense, low bush here; good bee coll. on flowers on bushes. sand ~~and~~ only
Camped here

STOP 506: NATAL: 33 MI. E. ~~UBOMBO~~ UBOMBO: 80 m; April 6/58 total = 50
(288)

In spots on the road between the Bay + Ubombo there are dense bush thickets. As this is a life zone, anywhere here is the same. over a 30 mile area. acacia plentiful.

STOP 507: NATAL: 3 MI. N. E. UBOMBO: 300 m; April 6/58. total = ~~125~~ 75
(305)

Camped here: $\frac{1}{3}$ the way up the small range of mts. This is on the hump just before the final, grassy/grinding climb. boulders on surface + thorn acacia plentiful
Ubombo = (308)

STOP 508: NATAL: 1 MI. E. MKUSI: 160 m; April 7/58. total = 100
(312)

This is on the present Ubombo-Mkusi Road, but as the road is no good for directions, this is computed distance as the collecting spot can easily be seen, at the base of the hills, from Mkusi. Boulders on surface; dry, low, scrub.

By road, this is
side miles from
Mkusi (318)

Mtubatuba = (381) St Lucia = (397)

S

STOP 509: NATAL: ST. LUCIA: 50 m; APRIL 7/58 total = 250
(397)

Collected mainly in the area on the east side of the bridge, and only a few yards from it. Dense, coastal forest. sand only on ground. Good sweep net collecting; Sphecids. Sphecids wasps are plentiful - digging holes.

~~STOP 510: NATAL: 7 MI. E. MTUBATUBA: 75 m; April 7/58. total = 250~~
(409)

STOP 510: NATAL: 7 MI. E. MTUBATUBA: 75 m; April 7/58.

(409) Camped here: this is at the edge of the endemic forest + the edge of planted eucalyptus + pine forests. sand soil. good sweeping + tiger beetle collecting. total = 250

Mtubatuba = (416) Empangeni = (448)

STOP 511: NATAL: 16 MI. N. E. ESHOWE: ~~450~~ 290 m; 8. IV. 58 total = 30
(466)

This is at the "Shaka test-of-Courage" monument on the Empangeni-Eshowe Road. Hilly grasslands + few boulders on surface.

Eshowe = (482)

STOP 512: NATAL: ESHOWE: 480 m; 8. IV. 58 total = 80
(482)

On the road out of town to the south there are some remnant forests in the creek canyons. Coll. here. Swamper + owl coll.

Umhlali = 54 (539)

STOP 513: NATAL: SALT ROCK BEACH, ^{UMHLALI} ~~UMHLALI~~; SEA LEVEL; 8.IV.58
(542)

Camped here at the Hotel Camp total = 200
grounds: right at the ocean side. this title ↑
can also be referred to as "Umhlali Beach," as there
is only one Umhlali.

Durban = (575)

STOP 514: NATAL: 21 MI. S. E. P'MARITZBURG: 600m; 9.IV.58 / total = 100
(599)

Some steep rocky slopes; partial remains of
the endemic woods. Small creek in the
gorge. Small piece of land here known as
"Wynles Canyon - 1955." app. 2 miles from Cato Ridge on Durban
side.

Pietermaritzburg = (620) in + (629) out.

STOP 515: NATAL: P'MARITZBURG: 675m; 9.IV.58 total = 50

Camp here in the public camping grounds
most of the cell. represents night grass
sweepings. Few to light.

KRANSKOP = (691)

STOP 516: NATAL: EMAKABELANI, 8 MI. N. KRANSKOP; 1075m;

(699)

10.IV.58 total = 100

rocky hillside - boulders on surface; tops
are all grassy; just at the beginning of
the descent into the Tugela River valley.

CAPE PROVINCE

STOP 517: NATAL: TUGELA ^{R.} CANYON, 19 MI. N. KRANSKOP
(710) 450m; 10.IV.58 total = 10

This is just 3 miles up the road from
Jameson's Drift - on the Kranskop side.
Jameson's Drift = (713)
EKOMBE = (730)

STOP 518: NATAL: EKOMBE FOREST, 39 MI. N. KRANSKOP.
(730)

1520m; 10.IV.58 total = 600

Camped here. Patches + hillsides covered
with endemic forest. Near the Ekombe
Mission Hospital + Police Station.
Very cool nights + cloudy afternoons

RICHMOND = (863)

STOP 519: NATAL: UMKOMAS R., 9 MI. S. RICHMOND: 375m;
(872)

12.IV.58 total = 125

Boulders on the valley flats + up to the
edge of the valley wall. Low scrub bush.
Rains came, so had to stop.

CAPE PROVINCE

Port St. Johns.

STOP 520: C.P.: PORT ST. JOHNS: SEA LEVEL: 13/IV.58 total = 400

(-) Collected almost entirely on the beach. Near the
river mouth + along the "1st Beach" is a 10 foot
high sand bank. Exc. coll. here. Thick endemic
forest in back. Monkeys in trees. 7-8 A.M. coll. is best.

CAPE PROVINCE

Port ST. JOHNS = (047) UMTATA = (103)

STOP 521: C.P. UMTATA: 675m; 14/IV/58. total = 75
(102) Few rocks on steep hillside about one mile to the east of town. small creek, too. Grasslands otherwise. rolling hills. flat rocks

STOP 522: C.P. 11 MI. E. ENGCOBO: 1000m; 14/IV/58. total = 50
(151) Rocky (boulders) hillside about one mile to east of town. Most of the area is high rolling hills. Bush in spots.

ENGCOBO = (152)

QAMATA POORT = (200)

STOP 523: C.P. QAMATA POORT; 900m; 14/IV/58 total = 7
(200) Rocky slopes just to the west of town. Short stop as rain started. Bush in patches.

STOP 524: C.P. 13 MI. W. QAMATA POORT: 940m; 14/IV/58 total = 800
(213) This is on the lands of a farmer named Mr. Weir. Grasslands + bush. In spots are rocky hills. Camped here. Flat rocks

QUEENSTOWN = (240)

STOP 525: C.P. 6 MI. N. WHITTLESEA: 1000m; 15/IV/58 total = 150
(255) Apparently a large valley. This is near the farm of one Mr. Davis. small, rocky shoulder of small hill. Acacia, (thorny) is plentiful.

WHITTLESEA = (261) BALFOUR = (298)

STOP 526: C.P. 8 MI. S. BALFOUR: 500m; 15/IV/58 total = 150
(306) Camped here; hilly country; mostly rocky slopes - cactus, thorny acacia + euphorbia are dense everywhere that citrus estates are not. This is near Ganyala

FT. BEAUFORT = (316)

STOP 527: C.P. 17 MI. S. FT. BEAUFORT: 500m; 16/IV/58 total = 100
(333) Roadside stop for some yellow daisies. Aloe, euphorbia (2 spp.) + bush acacia. Thick, unpenetrable bush.

STOP 528: C.P. 11 MI. N.E. GRAHAMSTOWN: 250m; 16/IV/58 total = 100
(350) This is on the "Queen's Pass" or "Bothe's Hill". Steep rocky slopes, acacia, euphorbia + aloe. Grahamstown = *350 (361)

STOP 529: C.P. 5 MI. S.W. GRAHAMSTOWN: 300m; 17/IV/58 total = 50
(366) This is at the "Stone Crescent Hotel" on the Grahamstown - P^{te} Elizabeth Highway. Rocky, low, thick, thorny bush with cactus aloe and euphorbia.

STOP 530: C.P. SANDFLATS: 280m; 18/IV/58 total = 75
(421) Sandflats is off the main road between Addo + Grahamstown. Beach type sand. Good for termites + wasps. By road, this is 25 miles N.E. of Addo.

STOP 531: C.P. DUNBRODY, 8 MI. S.E. KIRKWOOD: 60m;
(452)

18/IV/58 total = 125

Dunbrody is nothing but a railroad station and the remains of a once going mission + school. This is in the Sundays River Canyon. Sandy soil, and not where cleared for citrus crops, the area is low thorny bushes.

KIRKWOOD = (460)

STOP 532: C.P. 9 MI. W. KIRKWOOD: 140m; 18/IV/58 total = 100
(467)

Camped here. the bush here is patchy and at most, only 3 feet high. River valley still and sandy soil. This is also 1 mile east of Kariëga.

Kariëga = (470) Glenconner = (478)

PERDEPOORT.

STOP 533: C.P. 11 MI. S.E. GREYSTONE: 500m; 19/IV/58 total = 100
(491)

This is about the middle of the "Perde Poort" steep rocky canyon. Got some extremely small hydrophilids in an almost dried-up creek pond. Diptisids, also - about 50 small. cactus, euphorbia + bush.

GREYSTONE = (502) Mt Stewart = (541)

STOP 534

~~STOP 534~~ C.P. 6 MI. N.E. STEYTLERVILLE; 450m; 19/IV/58 total = 125
(553)

Rounded, rocky hills; extremely dry - desert like. Cactus + thorny acacia. This is computed distance from Steytlerville. 12 miles from Mt. Stewart.

Vloerfontein = (582) KLEINPOORT = (587)

STOP 535: C.P. 8 MI. S.E. KLEINPOORT: 350m; 19/IV/58. total = 30

(595) Camped here: heavy rains just at dusk. basically a sandy soil; low bush + cactus on rolling hills - some a bit rocky.

UITENHAGE = (639)

STOP 536: C.P. 6 MI. S.W. UITENHAGE; 250m; APRIL 20/58 total = 30

(645) low, patch bush; few rocks on surface; rolling hills.

STOP 537: C.P. VAN STAADENS PASS; 100m; 20/IV/58. total = 200

(655) Also the Van Staadens River. a canyon with endemic forest; also a public campground.

PORT ELIZABETH = (678) out = (703)

STOP 538: C.P. PORT ELIZABETH; 100m; 20/IV/58 total = 75

In the P.E. region and also at the public camp grounds at Humewood. sandy soil. Few rocks near the center of town on the face + bottom of a steep ravine.

HUMANSBURG = (754)

STOP 539: C.P. KARREEDOUW; 300m; 22/IV/58 total = 200

(788) On the south slopes of the Pass. Camped here. Heath + Protea are principle plants; rocky hills.

STOP 540: C.P. STORMS RIVIER; 200m; 23/IV/58 total = 125
(807)

This is on the west bank of the Storms Rivier and on the Cape town - P¹ Eliz. Highway. This is in the endemic forest. There should be good to excellent sifting in summer. 100 foot tall trees; no undergrowth.

STOP 541: C.P. PLETTENBERG BAY; 20m; 23/IV/58 total = 200
(846)

This is actually between Kourboom River and the establishments of Plettenberg Bay. Sandy soil. low bush & few boulders. good collecting in moss on the bottom of the hills. allow 2 miles for backtracking.

KNYSNA = (872)

STOP 542: C.P. 11 MI. S.E. GEORGE; 50m; 23/IV/58 total = 10
(898)

Camped here. Sand. At the ocean's edge low bush. steep bank off the beach.

Wilderness = (899)

GEORGE = (909)

STOP 543: C.P. 5 MI. W. HEROLD; 600m; 24/IV/58 total = 40
(926)

(+2 miles) Herold is on the old main road between George & Oudtshoorn. Boulder strewn hills; low, mesquite-type bush. (cress also.)

Herold = (933)

CAPE PROVINCE

HEROLD = (933)

STOP 544: C.P. 3 MI. N. HEROLD; 550m; 24/IV/58 total = 175
(936)

Shale-type rocks strewn on the surface. Gully; rocky hills; dry, scrubby bush.

OUTSHOORN = (959)

STOP 545: C.P. 3 MI. S.E. CALITZDORP; ^{275m} 24/IV/58 total = 100
(987)

Round-boulder strewn hills in a large valley; very dry; little patches of bush. + thorny acacia.

CALITZDORP = (990)

STOP 546: C.P. 11 MI. W. CALITZDORP; 700m; 24/IV/58 total = 75
(001)

This is at the summit of the Huis River Pass: man-made pool made excellent coll. for Dytiscids & Hydrophilids. Shale rocks on surface; low, thick bush. Amaleinstein, mileage is (005)

LADISMITH = (019)

STOP 547: C.P. 3 MI. S.W. LADISMITH; 475m; 24/IV/58 total = 150
(022)

Camped here: sandy to gravelly soil. shale rocks on hills with occasional white quartz outcrops. low bush with a lot of succulent growth.

STOP 548: C.P. 7 MI. N.E. BARRYDALE; 500m; 25/IV/58 total = 2
(060) a ♀ Tarantula and 6 young + one Lycosid.
shale rocks on surface. sandy soil; low bush.
BARRYDALE = (067) (068) for next stop.

STOP 549: C.P. 4 MI. S. BARRYDALE; 375m; 25/IV/58 total = 30
(072) In the Tradouw Pass at the spot where
you leave the road to see the bushman
paintings; steep rocky pass; creek.
shrubs, + steep, rocky meadows.
SWELLENDAAM = (097)

STOP 550: C.P. 2 MI. S. SWELLENDAAM; 175m; 25/IV/58 total = 50
(099) At the Breede River Xing. Alluvial
boulders on surface. low shrubs.
RIVER & ZONDEREND = (129)

STOP 551: C.P. 8 MI. E. CALEDON; 400m; 25/IV/58 total = 30
(151) In a gully on the foothills of the River
Zonderend Bergen. farmland.
CALEDON = (159)

STOP 552: C.P. HOUW HOEK PASS; 250m; 26/IV/58 total = 40
(175) This is also 3 miles W. of Botville;
rocky slopes. grass + low bracken.

SIMON'S TOWN = (240) approx.

STOP 553: C.P. CAPE POINT; 250m; 26/IV/58 total = 100
(247) Rocky slopes just before the entrance
to the Cape game refuge + Park.
Heather type bush. rocky-jagged.

STOP 554: C.P. CAPE POINT: SEA LEVEL; 26/IV/58 total = ~~200~~ 400
(252) Buffels Bay on the east side of the
Cape Peninsula. Coll. almost entirely
underseaweed on the beach. The west
side of the C.P. is very poor coll. for anything
underseaweed. Paid 12 shillings to
enter park - all collecting is technically
illegal - but...
CAPE TOWN OUT = (351) 3 miles here

STOP 555 (C.P.: BERG RIVIER, 4 MI. S. PIKET BERG; 150m;
(429) 30.IV.58 total = 150
at the Berg River Xing there is a face
of hill with rocks on the surface.
On S. side of the River. Farmland.
PIKET BERG = (433)

STOP 556: C.P. 2 MI. S.W. CITRUSDAL; 150m; 30/IV/58 total = 250
(461) Camped here. On the Grey's Pass.
on the old road: bush; rocky slopes.

CITRUSDAL = (463)

CITRUSDAL = (463)

STOP 557: C.P.: 12 MI. N. CITRUSDAL: 110m; 1/V/58 total = 75

(475) Along the old road on the N. shore of the River, Olifants. Few citrus groves: low scrub, few rocks on surface; rocky hills. sandy soil.

STOP 558: C.P.: 11 MI. S. CLAN WILLIAM; 1/V/58; 110m; total = 50

(485) No citrus groves; otherwise the same as the previous stop. Few water buttes.

~~STOP 558~~

CLAN WILLIAM = (496)

STOP 559: C.P.: CLAN WILLIAM; 100m; 1/V/58 total = 100

(498) low scrub; mainly few rocks on surface. sandy soil; irrigation ditch.

STOP 560: C.P.: 8 MI. N.W. CLAN WILLIAM; 100m; 1/V/58.

(504) Sandy soil + low scrub. hills total = 25

} rocks on surface - same as stop 558

STOP 561: C.P.: 12 MI. S.E. KLAVER: 140m; 1/V/58 total = 200

(518) Camped here: deep sand and brush, low. Below the dam. Beginning of valley broadening.

KLAVER = (530)

STOP 562: C.P.: 18 MI. S.E. NUWERUS: 230m; 2/V/58 total = 30

(566) succulents, rock type. low scrub. flat ground. gravelly. small boulders.

Vanrhynsdorp = (544) S. W. AFRICA

NUWERUS (NIEUWERUST) (584) Bitterfontein = (593)

STOP 563: C.P.: ¹⁹21 MI. S.E. GARIES: 220m; 2/V/58 total = 20

(611) Small rocky outcrop. low scrub + many succulents. Very dry + dusty.

GARIES = (630)

KHARKHAMS = (645)

STOP 564: C.P. KHARKHAMS, ¹⁵15 MI. N. GARIES: 725m;

(646) Camped here. 2/V/58 total =

Kharkhams is a small place, of four or so buildings, on a small hill. Thorn acacia, low scrub + few kopjes.

SPRINGBOK = (698) VIDOLS DRIFT = (775)

~~SOUTH WEST~~

STOP 565: C.P.: 31 MI. S. SPRINGBOK: 700m; 3/V/58 total = 20

(667) Granite kopjes; low bush + sandy soil. Very dry + poor collecting; few trees + ants. tree succulents here.

SOUTH WEST AFRICA

VIDOL'S DRIFT = (775)

STOP 566: S.W.A.: 18 MI. N. VIDOL'S DRIFT: 430m; 3/V/58

(793) Last of the few granite hills before open flats + alluvials. sandy soil. few succulents. Desert. total = 30

Karachurg (868) overnight in hotel.
GRUNAU = (898)

STOP 567: S.W.A.: 9 MI. N.W. GRUNAU: 1150m; 4/V/58.
(907) Desert. First granite total = 40
hills come upon when going to
Seeheim from Brunan. few thorn acacia
rocks on surface & sandy soil.

STOP 568: S.W.A.: 37 MI. N.W. GRUNAU: 730m; 4/V/58
(935) Canyon; shale rocks on total = 40
surface & sand. many euphorbias of the
small, bush shape.

SEEHEIM = (295) KONKIP = (020)

STOP 569: S.W.A.: 13 MI. W. KONKIP: 970m; 4/V/58 total = 10
(033) Camped here. deep sand in river canyon
number of thorn acacias; patches of grass.
Few colonial Ploceidae nests in acacias.

AUS = 086

STOP 570: S.W.A.: AUS: 1320m; 5/V/58 total = 25
(087) Rocky river pass. granite boulders.
few thorn acacia.

STOP 571: S.W.A.: 37 MI. W. AUS: 500m; 5/V/58 total = 60
(123) Shifting, whining, whimpering sands.
rock outcrop about 2' high at the roadside
Desert: Nothing but sand.

AUS (again) (160)

STOP 572: S.W.A.: KUBUB, AUS; 1450m; 5/V/58 total = 400
(169)

Camped here: Kulub is a ranch
name, and is some 3 miles ^{east}
of Aus, and on the right coming from
Aus. Granite hills; sandy floor in
canyon; acacia trees.

AUS (out) = 176

HELMERINGHAUSEN = (240)

STOP 573: S.W.A.: 35 MI. N. HELMERINGHAUSEN; 1420m;

(275) Camped here: 6/V/58 total = 15
Broad valley; rocks & sand.; thorn acacia,
low scrub & patch grass.

MALTEHÖHE = (324)

STOP 574: S.W.A.: 3 MI. E. MALTEHÖHE; 1320m; 7.V.58 total = 150
(327) sharp rocks; thorn acacia & low scrub.

STOP 575: S.W.A.: KUIS; 1170m; 7.V.58 total = 125
(382)

Kuis is on the Fish River. At this time
of year the river is nothing but pools
in the Rocks in the bed. Surrounding
area is thick, low, ~~kush~~ rock strewn
surface; brown sand soil.

KUIS = (382)

KALKRAND = (395)

STOP 576: S.W.A: 34 MI. N.W. KALKRAND: 1320m;

(429)

7.V.58

total = 15

Dry creek bed. Some of the largest trees (endemic) to be seen in the area.

Large farm house nearby. Sandy soil.

STOP 577: S.W.A: 14 MI. S. REHOBOTH: 1350m; 7.V.58

(443)

Camped here. Small dip in the flats. trees are up to 15 feet tall here & fairly thick; low scrub, too.

Dry, brown, sand soil.

REHOBOTH = (457)

STOP 578: S.W.A: 14 MI. N. REHOBOTH: 1500m; 8.V.58 total = 100

(471)

Hills are slate or shale-rock strewn; valley flats with round, whitish (possibly Calcium compounds) boulders. Thorn acacia & sparse knee-high grass. Very dry.

STOP 579: S.W.A: 10 MI. S. WINDHOEK: 1850m; May 8/58

(502)

~~Granite~~ ^{Quartz} base hills. white granite quartz with peculiar mica a metallic sheen. low grass & few thorn & scrub acacia. This is near the summit of the Augas Mts. pass from Rehoboth to Windhoek.

WINDHOEK = (512) mt = (518)

STOP 580: S.W.A: 6 MI. W. WINDHOEK: 1660m; May 8/58.

(524)

Camped here: thorny acacia / total = 75
knee-high grass, dry. This area is almost like the typical Rhodesian savannah. Few rocks on surface. Brown sandy soil.

WINDHOEK = (530)

OKAHANDJA = (571)

STOP 581: S.W.A: 15 MI. N.W. OKAHANDJA: 1460m; May 9/58

(586)

Camped here; small rocky promontories (3); grass very bothersome as it's full of stickers; low & open savannah scrub; thorny acacia.

1 Grasshopper at (637) + 1100m.

OMARURU = (653)

STOP 582: S.W.A: OKOMBANE; 900m; May 10/58 total = 130

(695)

Okombane is between the Brandberg Range & Omaruru. Surface spring here for about 100 yds. Good abundant water coll. Dry, sandy, thorny acacia, low bush & much decomposed granite; on the Omaruru R. Back track, Knockoff 9 miles.

STOP 583: S.W.A. 10 mi. W. OKOMBANE: 920 m; 10/V/58
(714) Camped here. Granite outcrops ²⁵⁰ ~~total = 200~~
in kopje form. sandy soil. Low scrub
& fairly open; very dry.

WHITE LADY + BRAND BERG (Mts)

STOP 584: S.W.A. TSISAB CYN, BRAND BERG (Mts) 550 m;
The Brandberg is May 11/58 total = 175
pretty nearly due west of Amaruru.
Dry, barren & rocky. Granite base sand
& rocks. Plains to the east at Uis are
rolling, sandy, & in spots covered lightly
by shoulder high, grasslike euphorbias.
Amaruru = (877) Camped here ↑

STOP 585: S.W.A. 19 mi. S. KALK FELD: 1420 m; May 13/58.
(898) low, scrub bush; thorn acacia total = 30
plentiful; dry - extremely so. few sharp
rocks not worth turning.
KALK FELD = (917)

STOP 586: S.W.A. 18 mi. S. OUTJO: 1150 m; May 13/58 total = 50
(965) Camped here: limestone formation hills
extremely dry. Dusty sand; thorn acacia
trees & scrub bush. One kind of very
botherome grass seed, similar to that at the
Limpopo R. area near Musina.

OUTJO = (973) in + (979) out & again (986)

STOP 587: S.W.A. 2 mi. N.W. OUTJO: 1250 m; MAY 14/58
(977) Dry, rocky ground; dusty; ~~and~~ rocks total = 250
on surface. Bush and thorn acacia.
OUTJO (on return) = (986).

STOP 588: S.W.A. 30 mi. N.W. OUTJO: 1250 m; May 14/58 total = 10
(016) First sign of the typical savannah woods.
Large farm near by; small bit of hills.
Very few thorn acacia.

⁵⁸⁹
STOP 589: S.W.A. 12 mi. S. OKAUKUEJO: 1100 m; 14.V/58.
(045) Camped here: this is the border of total = 40
the Etosha game Park. low woodlands.
dry grass. Few rocks on surface. Flats.
OKAUKUEJO = (055)

STOP 590: S.W.A. 32 mi. N.E. OKAUKUEJO: 1050 m;
(087) This is at the 15.V.58 total = 225
pond and spring by the roadside;
tho' I'm not sure, this could be Riet
Fontein; dusty, sandy; limestone
rocks; low & open bush.
Namutoni (135)
ONDANGWA = (222)

ANGOLA

ONDANGUA: (222)

STOP 591: S.W.A. ONDANGUA: 1100m; 16.V.58 total = 400

Camped here for 2 nights: on the 15th & the 16th. many man-made water ponds. Few old endemic trees; many palms of the *Coraxia* type. Dry & dusty. Mostly Vials here.

STOP 592: S.W.A. DSHIKANGO: 1080m; 17/V/58 total = 6

3 fleas, 1 dipteran, 2 *Belanogaster* wasps & 4 bats. Fleas & fly from bats. Fleas found on & in ears only. This is on the Angola - S.W.A. border. Sav. woods; dry sandy soil.

ANGOLA

STOP 593: Vila Pereira de Ega = (298)

BCA

STOP 593: ANGOLA: 7mi. N.V.P. de Ega: 1100m; 17/V/58

(355) Camped here: Saw woodlands. total = 125.

light-tan-coloured sandy soil. Dry; brown grass. *Embiopetara* at light (4) This is essentially a mopane forest.

MONGUA = (334)

STOP 594: ANGOLA: 19mi. E. ROCHADS: 1080m; 18/V/58
(341)

Mopane forest. woodlands; few total = 50
very tall trees. grey sand. many freshly-cut logs on ground.

ROCHADS = (360) HUMBE = (366)

STOP 595: ANGOLA: 4mi. S.E. CHIBEMBA: 1120m; 18/V/58
(416) River Xing. Camped here total = 400

Pools left in river bed. Also some early morning bush beating. Small rock outcrop. Sav. woodlands.

CAHAMBA = (420)

STOP 596: ANGOLA: 10mi. N. CAHAMBA: 1200m; 18/V/58.
(430) Granite Boulders. mopane total = 75

trees & dry bush. sandy soil. poor coll except at base of the biggest boulders.

CHIBEMBA: (465):

one large *kyproctid* here.

STOP 597: ANGOLA: 24mi. S.E. CHIBIA: 1320m; 19/V/58
(497) Camped here: granite kopjes. total = 150

many loose boulders at bases of kopjes. All the surrounding country is hilly & bush covered.

CHIBIA = (521)

CHIBIA = (521)

STOP 598: ANGOLA: 6 mi. N.W. CHIBIA: 1500m; 20/V/58 total = 100
(527) *Brachystegia* woodlands. light-grey sand.
Hilly; apparently 2 spp. of *Brachystegia* here.

Sa da Bandeira = (547) in + (548) ant

STOP 599: ANGOLA: 10 mi. ^{N.E.} SADA BANDEIRA: 1700m; 20/V/58
(558) Camped here. Sav. woodlands total = 300
reddish sand. good bark coll. on dead
+ freshly cut logs.

STOP 600: ANGOLA: 19 mi. N.E. SADA BANDEIRA: 1650m; 21/V/58
(567) Same type of forest as before. More total = 140
freshly cut trees; 30 foot trees; woodlands.
Brown sand. This is on the S.D.B. - Hofue Rd.

Sada Bandeira = (584)

STOP 601: ANGOLA: 5 mi. E. ARRIBA: 1000m; 21/V/58.
(607) Camped here. Coming down the total = 325
Escarpment from Sada Band. to Arriba.
Dropped from 1700m to 1000m here. Baobab trees.
Small creek just about to dry up. Very
dusty + dry. brown sand; few granite
boulders

Vila ARRIBA = (612)

STOP 602: ANGOLA: 18 mi. S.W. ARRIBA: 630m; 22/V/58
(630) Set of very rocky hills; baobabs total = 50.
are very numerous here. Sandy in spots.
Bush + thorns. Very dry.

Caraculo = (671)

STOP 603: ANGOLA: ³⁶ 4 mi. N.E. MOÇAMÉDES; 530m;
(678) Camped here. Granite 22/V/58. total = 250
kopjes, some very large. Here is a
small homestead. the hollows in the
kopjes have been concreted for water storage.
Bitus spp. 2 turtles. This is
desertous country. low scrub.

MOÇAMÉDES = (713) in + (718) ant.

STOP 604: ANGOLA: 6 mi. N.E. MOÇAMÉDES. 120m; 23/V/58
(724) Short stop mostly for embrioptera. total = 20
Dryish (heavy fog makes air very damp)
ground. sandy with boulders. Very sparse
and low surface vegetation. lichens +
such plentiful. 1 vial only.

STOP 605: ANGOLA: 11 mi. N.E. MOÇAMÉDES; 180m; 23/V/58.
(729) Same as stop 604: also one total = 75
(1) vial only. Mostly embrioptera again.

STOP 606: ANGOLA: 39 mi. S.W. ARRIBA: 470 m; 24/V/58.
(782)

Bush. sandy soil + rocks on total = 15
surface. Rocky hills around. Stop +
also covered with kauffers + bush.

VILA ARRIBA (821)

STOP 607: ANGOLA: 11 mi. N.E. ARRIBA: 850 m; 24/V/58

(832) Sandy soil; dry bush, almost total = 10
savannah woodlands. Few rocks on
surface. Few baobab trees. No leaves
on the baobab trees.

STOP 608: ANGOLA: 32 mi. N.E. ARRIBA: 900 m; 24/V/58

(853) Camped here. Essentially the total = 125
same as the last stop, only a bit more
grained (sub ground) water present. No palm
trees. Sav. woodlands. sandy soil.

Lola = (867) Zinde = (876)

STOP 609: ANGOLA: 14 mi. N. ^W CACULA: 1000 m; 25/V/58 total = 100

(900) Bush in bloom. Flower sweeping. This
is at a river crossing. Scrub woodlands.
Dry. Sandy + rocky.

CACULA = (914).

CACULA = (914)

STOP 610: ANGOLA: CACULA: 1530 m; 25/V/58. total = 200

(915) Woodlands. 20-30 foot tall trees.

Trees much greener than all the areas
previous to this. Green grass in spots.
Sandy soil. NO rocks.

(?) Posto do Negola (?) (928).

STOP 611: ANGOLA: 19 mi. N.E. CACULA: 25/V/58. ^{1550 m;} ~~1530 m;~~
(933) Camped here. Woodlands. total = 40

reddish sand. Reminds one strongly
of the Katanga. Green grass + trees.
This is on the Cacula - N'Gola Road.

NEGOLA = (951)

STOP 612: ANGOLA: NEGOLA: 1550 m; 26/V/58. total = 100

(951) Dry; sandstone rocks on surface.
Woodlands. Hilly.

CALUQUEMBE = (981)

STOP 613: ANGOLA: 7 mi. S. CALUQUEMBE; 1680 m; 26/V/58.

(974) Large granite boulders on total = 50
surface. Most are deeply embedded.
Woodlands. Recent rain

CHICUMA = (011)

STOP 614: ANGOLA: 10 MI. N. CHICUMA: 1520m; 26/V/58
(021) Remnant of a once- total = 10
gallery forest on the escarpment.
Dense undergrowth & few tall trees

STOP 615: ANGOLA: 18 MI. N. CHICUMA: 1200m; 26/V/58.
(029) Camped here. Woodlands. total = 175
sandy soil. Same large, hill-shaped
termite mounds as were seen in the
Katanga. Tall grass & damp soil in
spots.

GANDA (MARIANO MACHADO) 054.

STOP 616: ANGOLA: 5 MI. W. NOVA LISBOA: 1740m; 27/V/58
(147) Camped here. Woodlands. total = 175
sandy soil. tightly packed. low round
termite ~~tubs~~ plentiful domes plentiful.
Cool at nights

NOVA LISBOA = (152) in + (175) out

STOP 617: ANGOLA: 12 MI. S. V^a TEIXEIRA DA SILVA: 1470m;
(210) Camped here. ~~W. of~~ 28/V/58 total = 20
Well agricultural sav. woodlands. Brown to
grey sandstone soil. Sparcely separated,
few, tall trees (50-60')

V^a Teixeira da Silva = (222)

Teixeira =

STOP 618: ANGOLA: 13 MI. N.W. V^a T. DA SILVA: 1520m;
(235) Woodlands. Mountain 29/V/58. total = 15
stop for emigration check. Sandy soil.
No rocks. Few logs.

STOP 619: ANGOLA: 14 MI. S.E. HENGUE; 1720m; 29/V/58.
(247) Woodlands. Just a few hundred total = 150
yards from the crest of the hill before
a big descent into a large valley. Rather
rough, peculiar rocks about on surface.
Grass is mostly belly-high.

HENGUE = (261)

STOP 620: ANGOLA: 2 MI. N. HENGUE: 1550m; 29/V/58.
(263) Woodlands. low grass. total = 100
few tall trees about 50ft. Sandy soil. No rocks.

NAMBA = (277)

STOP 621: ANGOLA: 15 MI. N.W. NAMBA: 1350m; 29/V/58
(292) Camped here. Woodlands. total = 80
Round hills. Valleys are usually meadows
somewhat sloping, and almost always
swampy. Few Banana trees about.

STA. COMBA DÃO = (312)

STOP 622: ANGOLA: 6 mi. N.W. STA. COMBA DÃO: 1250m; 30/V/58
(318)

Woodlands. A bit off the new main road. And is apparently near Tongos but no town visible. Rocky hills or outcrops surrounding. Also granite domes. total = 125

STOP 623: ANGOLA: 19 mi. S.E. EBO: 1270m; 30/V/58. total = 12

(333) Momentary stop only. Woodlands. Granite domes. This is on the south side of Arro or Queve River. Many rock-pile graves on the granite domes. Very interesting to look at.

STOP 624: ANGOLA: 11 mi. S.E. QUILENDRA: 1000m; 30/V/58.

(386) Camped here. Rocky hills. Heavy agriculture - some coffee in particular. Granite outcrops. Sandy-clay soil. total = 75
QUILENDRA = (397) High grass.

STOP 625: ANGOLA: QUILENDRA: 770m; 31/V/58 total = 150

(396) About a $\frac{1}{2}$ mile on the S.E. side of the village. Coffee plantation with the original forest taken out except for the tallest trees. Sandy soil.

STOP 626: ANGOLA: 4 mi. S.W. QUILENDRA: 900m; 31/V/58.

(404) This is in a coffee plant. that area was originally forested. Owned by Rosa Emilia. Steep hills. total = 200

Quilenda, Porto Amboim, Gabela ft. = 423

QUIRIMBO = (419)

STOP 627: ANGOLA: 4 mi. S.W. QUIRIMBO: 250m; 31/V/58.

(423) Camped here. Quilenda is in the mountains, this stop and Quirimbo are on the lowlands. Beginnings of the baobab trees. High grass. total = 50

STOP 628: ANGOLA: 10 mi. S.W. QUIRIMBO: 180m; 1/VI/58.

(429) Thick Bush; some grassy clearings - natural. Baobab trees. total = 75

Porto Amboim = (463)

STOP 629: ANGOLA: 3 mi. N.E. PORTO AMBOIM; 80m; JUNE 1/58.

(466) Powdered clay type soil. Grass & low surface vegetation. total = 25

Stenches

(481) + 150m; (18 mi. N.E. P.A.) Sand, ^{meas.} gray

CAPOLLO = (500)

STOP 630: ANGOLA: CAPOLLO: 110m; JUNE 1/58 total = 35

(500) Grassy hills, remnant bush in spots. Capolo R. Canyon at Capolo. Palm oil grove at river's edge. Some sandstone rocks.

CABOLO

STOP 631: ANGOLA: 6 mi. N.E. ~~POSSIBLY~~ CABOLO; 1/VI/58.

(506) Camped here: grassy mesa. total = 40
There is small patch of bush. Generally
clay & sand patches with occasional
rock formations. Cotton grown here.

STOP 632: ANGOLA: 41 mi. S. MUXIMA: 100m; 2/VI/58.

(532) Quick stop. Creek, apparently total = 25
from a spring. Waterlilies. Bush and
baobab trees.

Dembachio = 541

STOP 633: ANGOLA: 19 mi. S. MUXIMA: 250m; 2/VI/58.

(554) Thick sand. Very dense bush. total = 175
and many tall trees - possibly ground
water here. Baobab trees - only a few.
Many trees over 60 feet high.

MUXIMA = (573)

STOP 634: ANGOLA: 12 mi. N.W. MUXIMA: 200m; 2/VI/58.

(585) Camped here. Baobabs ~~in mass~~ total = 100
in mass. low, dense bush. Open
grassy spots with high grass.

STOP 635: ANGOLA: LUANDA: 50m; 3/VI/58. total = 250

Camped here for many nights. at the
6.6 km N.E. of Luanda on the way to
Ambre^{TE} Bush, baobabs & palms.
→ or more accurately, on road to Caxito

LUANDA = 708 (+ 8 miles.)

STOP 636: ANGOLA: ²⁷ 18 mi. N.E. LUANDA: 40m; 7/VI/58.

(740) Under logs & in irrigation ditch. total = 25
in an oil palm grove. This might
be Barra do Dande, but not for sure.

STOP 637: ANGOLA: 18 mi. N.E. LUANDA: 150m; 7/VI/58.

(746) Camped here. Euphorbia & baobabs. total = 250
palms, bush & grass. Good net sweeping
Also a few large Ecophila Ecophila nests.

f

GHANNA, TDKORADI-16 VI-57. ~~total = 225~~

On En Route via Ship.

GHANA: TAKORADI: SEA LEVEL: ¹⁴~~15~~/4/58. total = 300
along the harbour
road along the coast.
Few flowers. Mostly grass sweeping

GHANA: G.M.N. TAKORADI: ¹⁵~~16~~/4/58. total = 75
Forest. See E.S.R. The forestry
service people took E.S.R. out
to a forest. The For. Service is
at the harbour Entrance, just
past the customs gate on the
way to town.

IVORY COAST: ABIDJAN: 17. ^{VI}~~FE~~. 57 (total = 450)

Forêt du Banco again. Dense rain
forest. Cloudy day. Du Banco is
at the edge of town, but about 6 miles
from the port.





1. TEXAS: DEL RIO: 10.VI.57 (total = 6)
A at a garage. Insects at light.
2. Aboard ship. 1 Cicindella, 1 Katydid. Found on the deck of
A ship while at sea. 15.VI.57 (total = 2)
3. Aboard ship. Between Cape Verde Islands, and Dakar,
A Senegal. Lat. 15.00^N; Long. 18.37 W. (total = 11)
4. SENEGAL: DAKAR: SEA LEVEL: 30.VI.57 (total = 650)
A Collected mainly at the Botanical Gardens. I'm not
sure if the gardens were all endemic. Many flowers.
5. FRENCH GUINEA: CONAKRY: SEA LEVEL: 2.VII.57 (total = 450)
A Coll. in city and at the bauxite wharves. Crickets
taken habitated holes in ground. Chirp at entrance.
6. LIBERIA: MONROVIA: 5.VII.57 (total = 1500)
A Coll. in rain forest north of town. Good coll. in
decaying breadfruit on ground. This is near the
St. Paul R. crossing. (6 mi N.W. Monrovia)
7. IVORY COAST: ABIDJAN: 7.VII.57 (total = 200)
A Coll. at "La Forêt Nationale du Banco." about six
miles from Abidjan port.

8. FR. EQ. AFRICA: GABON: PORT GENTIL: 10.VII.57

↓
14.VII.57 (total=1800)

Coll. most every type of area within a 1½ mile radius of Port Gentil. Some patches of the rain forest. Some large, swampy meadows. Sweeping is excellent. Few ponds and stagnant, freshwater creeks for H₂O Buttes.

9. FR. EQ. AFRICA: ^{GABON} MIDDLE CONGO: POINTE NOIRE: 16.VII.57 (total=1800)

Near the governor or mayor's home. Small patch of swamp being cleared out + drained. Excellent bark collecting. Poor H₂O collecting.

10. ANGOLA-LUANDA: 18/19.VII.57 (total=1500)

Coll. in a dry, baobab + euphorbia area. Grass thin and brown. This is at the N.E. corner of town on the way to Cacuanu. Small creek.

11. B. CONGO: MATADI: ²²~~26~~.VII.57 (total=900)

At Matadi and also at an oil depot called "Ango Ango," which is just below Matadi on the River. Swifts in colony on bank at Ango Ango.

BELGIAN CONGO:

STOP 1: 6 mi. N. MATADI: 24.VII.57 (total=150)

Camped here. Grassy rolling hills. Gallery forests in valleys and creek canyons. Dry season.

STOP 2: 18 mi. N. MATADI: 25.VII.57 (total=1500)

Aerial and bark collecting. Frost slash on ground. Dry ground.

(=15.6 mi.)

STOP 3: 25 KM. S. TSHELA: 25.VII.57. (total=400)

Patchy-forest + meadows. Camped here. Coll. near the highway.

STOP 4: 6 mi. E. TSHELA: 26.VII.57. (total=200)

Canyon. Apparently an old, grown over oil palm plantation. Rain forest area.

STOP 5: 3 km. S. TSHELA: 26.VII.57. (total=100)

Old palm plantation. Mayombe Forest. Cleared spots, but still thick patches of the old forest.

STOP 6: 50 km. S. TSHELA: 26.VII.57. (total=1500)

Camped here for 2 nights. High rain forest. small creek. Steep canyon walls in spots.

B. CONGO:

STOP 7: 56 Km. N. MATADI: 28.VII.57. (total = 1000)

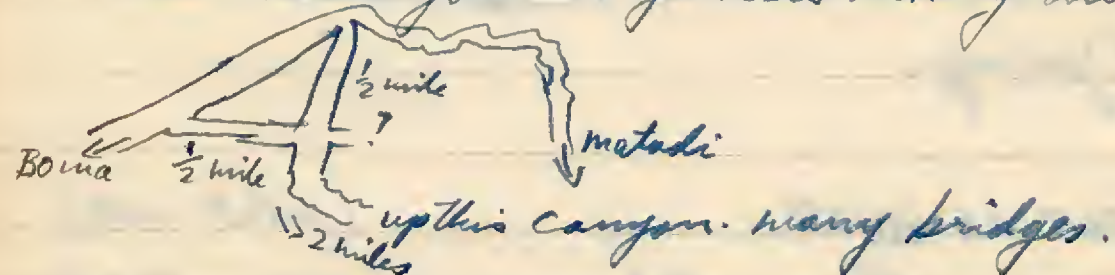
Rain forest. Harvesting of the largest trees for lumber. Good bark collecting. Some 2nd growth forest. Banana Plantations nearby.

STOP 8: 36 Km. N. MATADI: 28.VII.57 (total = 20)

Old banana plantation. Mostly an Embioptera stop.

STOP 9: 12 MI. N. MATADI: 28.VII.57. (tot = 300)

Camped here. Light collecting only. Small creek in canyon. Large trees lining the creek.



STOP 10: 17 MI. E. MATADI: 29.VII.57. (total = 150)

Small swampy area. New road construction. Few ponds. bush & grass.

STOP 11: 40 MI. E. MATADI: 29.VII.57 (total = 250)

Camped here. Rolling hills; high grass. Islands of trees Matadi-Loo'ville Road.

B. CONGO

STOP 12: 74 MI. E. MATADI: 30.VII.57 (total = 3)

Dry. Grassy with spotty trees.

STOP 13: 28 MI. S.W. THYSVILLE: 30.VII.57. (total = 100)

Small valley with creek. Good collecting. Termites found in termite nest. trees line the creek.

STOP 14: THYSVILLE: 30.VII.57. (total = 300)

About 1/2 mile W. of Thysville. Thick forest. Good collecting. Steep hills. Well drained.

STOP 15: 6 MI. E. THYSVILLE: 30.VII.57. (total = 200)

Camped here. (2) Embioptera at light. Burnt over grasslands. Light collecting.

STOP 16 (OMIT - same as STOP 14.)

STOP 17: 7 MI. S.E. THYSVILLE: 31.VII.57. (total = ¹⁰⁰/~~15~~)

Banana grove. few logs on ground with bark. Raining lightly.

STOP 18: KOLO (20 MI. S.E. THYSVILLE: 31.VII.57. (total = 130)

Coll. on a large, agricultural experiment station. Well farmed. Few patches of forest.

STOP 19: 28 MI. S.E. THYSVILLE: 31.VII.57. (total = 15)
Camped here. light coll. only.

STOP 20 (Omit - Same as stop 17)

STOP 21: 39 MI. S.E. KISANTU: 1.VIII.57 (total = 200)
(039) Gallery forest at roadside. Much lower bush & few flowers.

KISANTU-INKISI E (3000)

STOP 22: 68 MI. S.E. KISANTU: 1.VIII.57 (total = 75)
(068) Camped here. Sandy soil and dense bush and woodlands. Cool weather and poor coll. This is on the Ngidinga - Popokabaka road. NGIDINGA = (048) approx.

STOP 23: 99 MI. W. POPOKABAKA: 2.VIII.57. (total = 200)
(080) Sandy soil; second growth forest. large *Stenopelmatus* found in manioc garden. Surrounding is woodland savanna.

STOP 24: 91 MI. W. POPOKABAKA: 2.VIII.57. (total = 175)
(088) Dry, sandy; some second growth forest & but mostly woodlands. Found mantispids in spider egg case.

STOP 25: 75 MI. W. POPOKABAKA: 2.VIII.57 (total = 650)
(104) Burned and cleared woodlands & gallery forest. Coll up on the plateau & in nearby creek.

STOP 26: 52 MI. W. POPOKABAKA: 2.VIII.57. (total = 300)
(127) Dry, sandy. Dense woodlands. 1 snake. Much of the area has been recently cleared.

STOP 27: 41 MI. W. POPOKABAKA: 2.VIII.57. (total = 75)
(138) Camped here. Burnt-over woodland savanna. Night collecting only.

STOP 28: 35 MI. W. POPOKABAKA: 3.VIII.57. (total = 1)
(144) Dry & burnt over. Much the same as STOP 27.

STOP 29: 21 MI. W. POPOKABAKA: 3.VIII.57. (total = 35)
(158) Small canyon with swift creek and thick forest.

STOP 30: 16 MI. W. POPOKABAKA: 3.VIII.57. (total = 15)
(163) Dry; sandy soil; woodlands. NOT burnt-over.

POPOKABAKA (179)

STOP 31: 10 MI. N. POPOKABAKA: 3.VIII.57. (total = 20)
Dry; burnt-over, rolling hills. New green grass is sprouting. Lge hoppers - can't catch.

B. CONGO

STOP 32: 47 MI. N. POPOKABAKA: 3. VIII. 57. (total = 20)
(225) Dry; sandy soil; low woodlands, + Not burnt over.

STOP 33: 57 MI. N. POPOKABAKA: 3. VIII. 57. (total = 150)
(235) Camped here. Burnt over recently. Dense woodlands. Rolling hills. Windy. Sandy soil.

STOP 34: KENGE: 4. VIII. 57. (total = 30)
(269) mostly butterflies at the river crossing. Gallery forest here is very thick & tall.
(KENGE = 269)

STOP 35: 3 MI. E. KENGE: 4. VIII. 57. (total = 200)
(272) Dense gallery forest. Caught one large Nymphalid. Excellent collecting. Some cleared spots. Bamboo is common here. Slash was left on ground.

STOP 36: 13 MI. E. KENGE: 4. VIII. 57. (total = 800)
(382) Camped here. Gallery forest. Creek canyon. Forest is dense. surrounding hills are rolling grasslands. Many butterfly photos. - movies.

STOP 37: 34 MI. E. KENGE: 5. VIII. 57. (total = 100)
(302) Canyon. creek + deep gallery forest.

STOP 38: 61 MI. E. KENGE: 5. VIII. 57. (total = 75)
(329) At river crossing - ferry. many bees and bees at the beehived spots at roadside gallery forest.

STOP 39: 74 MI. E. KENGE: 5. VIII. 57. (total = 15)
(342) ferry crossing. dense gallery forest. like what is popularly known as "jungle."

MAISI MANIMBA = (364) approx.

STOP 40: 21 MI. E. MAISI MANIMBA: 5. VIII. 57. (total = 25)
(385) This is also 108 MI. E. Kenge. Quick stop. Dense forest. Creek. Very cloudy sky. Caught Lyretails in creek.

STOP 41: 39 MI. E. MAISI MANIMBA: 5. VIII. 57. (total = 300)
403 Camped here. good mayfly collecting. mainly palm oil groves. Dense forest along creeks. Night coll. only.

STOP 42: 56 MI. N. LEVERVILLE: 6. VIII. 57. (total = ?)
(413) Took embigstera ONLY

STOP 43: 44 MI. N. LEVERVILLE: 6. VIII. 57. (total = 110)
(425) lowland gallery forest. Early morn. catch only. Took some photos.

B. CONGO

STOP 44: 36 MI. N. LEVERVILLE: 6.VIII.57. (total = 100)
(433) Large, freshly felled tree. Coll in sun patches
on forest floor. Dense gallery forest.

STOP 45: 11 MI. N. LEVERVILLE: 6.VIII.57. (total = 100)
(458) Open marsh in low valley. Remnants of a
once dense forest. Reps in stagnant pools.
Dragonflies extremely fast.

LEVERVILLE = (469)

STOP 46: 10 MI. S. LEVERVILLE: 6.VIII.57. (total = 8)
(479) NO Embryonata. Gallery forest.

KIKWIT = (500)

STOP 47: 12 MI. E. KIKWIT: 6.VIII.57. (total = 75)
(512) Camped here. night coll. only. High mesa.
grasslands. patches are tilled. Few trees.
many Coprinae flying.

STOP 48: 26 MI. E. KIKWIT: 7.VIII.57. (total = 5)
(526) Slopy grasslands above gallery forest.

STOP 49: 33 MI. E. KIKWIT: 7.VIII.57. (total = 1)
(533) Same as STOP 48. Coprine on road.

STOP 50: 46 MI. W. IDIOFA: 7.VIII.57. (total = 250)
(563) Steps in gallery forest canyon over a distance
of 3 miles.

STOP 51: 12 MI. W. IDIOFA: 7.VIII.57. (total = 100)
(597) Open grassy spot. Sp. swift flowing creek
water clear, fresh + warm.

IDIOFA = (609)

STOP 52: 25 MI. S. IDIOFA: 7.VIII.57. (total = 600) ✓
(634) Idiofa is on the Kikwit - P.E. Francqui road.
100 miles E. of Kikwit. Grassy mesa. Camped here
night coll. only. Camped here.

STOP 53: 41 MI. S. IDIOFA: 8.VIII.57. (total = 500)
(650) Flat, grassy mesa. Minor burning. Similar to
previous stop. ^{Few} trees.

STOP 54: 16 MI. N.W. KILEMBE: 8.VIII.57. (total = 1)
(667) large creek. Still on mesa. area same as
2 previous stops.

KILEMBE = (683)

STOP 55: 19 MI. S.E. KILEMBE: 8.VIII.57. (total = 1)
(702) Loango River bar (ferry) Gallery forest.

STOP 56: 42 MI. S.E. KILEMBE: 8.VIII.57. (total = 7)
(725) Thin 2nd growth woodlands. recent rain.
Quick stop only, as a whole village descended
upon us immediately.

STOP 57: 52 MI. S.E. KILEMBE: 8.VIII.57. (total = 30)
(735) Dry forest in woodlands. Did some ground
digging for scarabs. Bit further on is a dense
gallery forest + deep river.

STOP 58: 31 MI. ^{N.W.} ~~N.E.~~ TSHIKAPA: 8.VIII.57. (total = ?)
(750) Camped here. Night coll. only. Very poor.

STOP 59: 17 MI. W. TSHIKAPA: 9.VIII.57. (total = 650)
(764) Small patch of cleared, unburned forest. all
tall trees are left, only under bush is cut out.
Morning collecting.

TSHIKAPA = (781)

STOP 60: 15 MI. N.E. TSHIKAPA: 9.VIII.57. (total = 5)
(796) cleared + burned over forest.

B. CONGO

STOP 61: 28 MI. N.E. TSHIKAPA: 9.VIII.57. (total = 4)
(809) Cleared woodlands. patchy forests. Dry. Few natural.
cleared areas with grass.

STOP 62: 33 MI. N.E. TSHIKAPA: 9.VIII.57. (total = 12)
(814) dense 50-75' tall forest. No cleared areas.

STOP 63: 73 MI. ^{N.E.} ~~E.~~ TSHIKAPA: 9.VIII.57. (total = ?)
(854) Camped here. coll. by lights. open region. Not
burnt-over. Area is between two large forests.

STOP 64: 76 MI. S.W. LULUABOURG: 10.VIII.57. (total = 75)
(859) Early morning stop at the Luoko river. Rocky
river. tall gallery forest. Uncleared.

LULUABOURG = (935)

STOP 65: 24 MI. N.E. LULUABOURG: 10.VIII.57. (total = 25)
(959) Thick savannah woodlands - uncleared. Small
river with sandy bottom.

STOP 66: 63 MI. E. LULUABOURG: 10.VIII.57. (total = 250)
(998) Camped here. Came off the main road and
camped near Lake Mukamba on the N.E. hills.
Rolling hills, low grass. No trees here.
some soil tilling here.

STOP 67: 70 MI. E. LULUABOURG: 11. VIII. 57. (total = 275)
(005) Grassy rolling hills with trees thinly clustered.
Morning collecting.

STOP 68: 32 MI. S.W. LUSAMBO: 11. VIII. 57. (total = 1)
(040) Cleared & burnt over 50-75' gallery forest.

STOP 69: 22 MI. S.W. LUSAMBO: 11. VIII. 57. (total = 400) ✓
(050) Low forest with few tall trees. Had native help here.

STOP 70: 7 MI. S.W. LUSAMBO: 11. VIII. 57. (total = 65) ✓
(065) Open, dry country. Clusters of low trees.

LUSAMBO = (072)

STOP 71: 16 MI. N.E. LUSAMBO: 11. VIII. 57. (total = ⁷⁵~~50~~)
(088) Doryline ants on march. Dense forest.
deep, sandy soil. Photos of ants on march.

STOP 72: 21 MI. N.E. LUSAMBO: 11. VIII. 57. (total = 125)
(093) Camped here. night coll. only. sandy ridge
almost overlooking the Sankuru River. below
and to the right. Bamboo & oil palms
Dense forest ~~was~~ in other side of road.

STOP 73: 39 MI. N.E. LUSAMBO: 12. VIII. 57. (total = 750)
(111) Morning catch. sandy soil. small creek
running through a broad, spottedly-forested
canyon. good creek sliving.

STOP 74:
(204) LUBEFU = (180) approx.

STOP 74: 24 MI. N.E. LUBEFU: 12. VIII. 57. (total = 225)
(204) Camped here. night coll. mainly. Rolling
grasslands with scanty clumps of ~~the~~ forest,
widely separated.

[but see other copy of diary, which says 78 mi. The
print labels were made for 78 mi.]
STOP 75: 48 MI. N.E. LUBEFU: 13. VIII. 57. (total = 75) ✓
(228) Ferry at Lomami River. fair sized river in
sparse woodlands. flat, sandy ground. Dense
gallery forest along river only.

STOP 76: 56 MI. S.W. KIBOMBO: 13. VIII. 57. (total = 6)
(250) Quick stop. flat woodlands. sandy soil. few
small patches of forest - very sporadic.

STOP 77: 23 MI. ^{W.}~~S.W.~~ KIBOMBO: 13. VIII. 57. (total = 10)
(283) same as previous stop.

STOP 78: 14 mi. W. KIBOMBO: 13.VIII.57. (total = 125)
(292) gallery forest, dense & humid. damp ground.
few pools on floor good for Leps.

KIBOMBO = (306)

STOP 79: 20 mi. E. KIBOMBO: 13.VIII.57. (total = 300) ✓
(326) Camped here. gravel soil. Rolling grasslands.
few swamps. Borass palms. Elephants
are here. Strong winds during the night.

STOP 80: 62 mi. E. KIBOMBO: 14.VIII.57. (total = 300) ✓
(368) Dense gallery forest. tall trees. 3 vials.

STOP 81: KAMA MISSION: 14-15.VIII.57 (total = 225)
(449) Mission at Kama on the Elila River.
↓
(487) Agricultural clearings. low, dense forest.
This is off the main east-west road. Is on
the road that runs due N. to Shabunda.

STOP 82: 36 mi. E. KAMA: 16.VIII.57. (total = 20)
(523) Heavy clearing and burning. Clearing of the
forest is for a coffee plantation.

7-800 m;

STOP 83: 45 mi. E. KAMA: 16.VIII.57. (total = 850)
(532) Few cleared areas. coll. over a 3 mile stretch
of road. 1 vial. Dense forest.

STOP 84: 55 mi. S.W. KAMITUGA: 16.VIII.57. (total = 400) ✓
(560) Camped here. Undisturbed forest, dense.
Mountainous region steep river canyon
and fair-sized river. Cool night.

STOP 85: 44 mi. S.W. KAMITUGA: 650 m; 17.VIII.57. (total = 175) ✓
(571) This is at the 248 km. mark from Bukavu.
Steep hills. Disturbed dense forest. 2 *Cyprinids*
(♂ & ♀) taken in swiftest part of a creek.

STOP 86: 33 mi. S.W. KAMITUGA: 675 m; 17.VIII.57. (total = 800)
(582) Kizila River Xing. Mud puddle. Stopped for bus
in the ~~water~~ mud & mud cliffs.

STOP 87: 15 mi. S. KAMITUGA: 700 m; 17.VIII.57. (total = 20) ✓
(600) 202 km from Bukavu. Small ravine with
creek. Disturbed forest, dense. No burning.

STOP 88: 6 mi. S. KAMITUGA: 900 m; 17.VIII.57. (total = 30)
(609) Coll. over a 6 mile range. alt. varies from 800-
950 m; Steep mountainous region. tall, dense
forest. quartz region. mines on nearby hills.

B. CONGO.

KAMITUGA = (615)

STOP 89: 4 mi. E. KAMITUGA: 1000 m; 17. VIII. 57. (total = 65)
(619) Moment. stop for Embryonata. None. NO large trees
Burnt + cleared areas up higher on the slopes.

STOP 90: 33 mi. E. KAMITUGA: 17. VIII. 57. (total = 75)
(648) Ulindi River canyon. Mwenza is more a
native settlement than a govt outpost stop
river canyon Camped here. cool night.

STOP 91: 37 mi. E. KAMITUGA: 1100 m; 18. VIII. 57. (total = 125) ✓
(652) high grassy hills. gallery forests between
the hills. 1 vial.

STOP 92: 46 mi. ^{N.E.} ~~E.~~ KAMITUGA: 930 m; 18. VIII. 57. (total = 75) ✓
(661) Broad open spot in canyon. Near village, so
much of area has been cleared. largest trees still
stand.

STOP 93: 41 mi. S.W. BUKAVU: 1500 m; 18. VIII. 57. (total = ¹⁰⁰~~105~~) ✓
(684) High plateau with low bare hills. few marshes
in the depressions. Strong wind continuously.
3 vials. Clear + warm sun.

²⁷
~~15~~ mi. S.W. STOP 94: ~~B~~ BUKAVU: 1650 m; 18. VIII. 57. (total = 200)
(740)
(648) Creek between 2 grassy hills. Did creek
and mouse collecting. 1 vial.

STOP 95: 15 mi. S.W. BUKAVU: 2100 m; 18. VIII. 57. (total = 12)
(710) Camped here. Eucalyptus grove on hilltop.
very cold + windy. Only mosquitoes to light.

BUKAVU = (725)

STOP 96: 5 mi. N. BUKAVU: 1475 m; 19. VIII. 57. total = 25.
(730) at road entrance to some hot springs. This is on
the shores of Lake Kivu. Woodlands. 1 vial.

STOP 97: LWIRO: 1550 m; 19. VIII. 57. (total = 75.)
(761) Coll. on J. R. S. A. C. grounds. small creek.
Originally brush, but now a rock garden spot.
No Coll. mainly at the main gate.

STOP 98: 8 mi. S. UVIRA: 800 m; 21. VIII. 57. (total = 88) ✓
- Shores of Lake Tanganyika. West shore. Rocky
section, steep, and with low bush.

5A

STOP 99: 15 mi. S. UVIRA: 800 m; 21. VIII. 57. (total = 66)
- Same as previous stop.

STOP 100: ~~25~~ 25 MI. S. UVIRA: 800m; 21.VIII.57. (total = 90)
Savannah forest. about 1/2 mile from lake shore.
Tropical forest remnant

UVIRA = 4(924)

STOP 101: 10 MI. N. UVIRA: 825m; 22.VIII.57. (total = 100)
(934) *Brachystegia* + *euphorbia*. Alluvial gravel.

STOP 102: 22 MI. N. UVIRA: 825m; 22.VIII.57. (total = ⁵⁰~~25~~)
(946) same as previous, except this time at a creek.

STOP 103: 30 MI. N. UVIRA: 960m; 22.VIII.57. (total = 25)
(954) Open savannah. gecko lizards. flat ground.

STOP 104: 36 MI. N. UVIRA: 1000m; 22.VIII.57. (total = 50)
(960) hill plateau. barren except for low grass
and occasional bushes.

STOP 105: 47 MI. N. UVIRA: 900m; 22.VIII.57. (total = 100)
(971) Camped here. Na_2CO_3 hot springs. About
a 1/2 mile from the road, to the left as you go
north. Reddy hills surrounding.

STOP 106: LWIRO: 1550m; 25.VIII.57. (total = ~~20~~)
same as stop # 97. 1 vial.

STOP 107: LWIRO RIVER: 1900m; OR 47 Km. N. BUKAVU.
25.VIII.57. (total = 2000)
On the Irasac grounds. Locally known as
"TShibati" Coll. mostly in a meadow. (sweeping
+ dung work) some creek seining.

1 label

STOP 107: LWIRO R. FALLS: 2000m; OR 47 Km. N. BUKAVU.
26.VIII.57. (total = 350)
Mountains, wooded region. Bracken is thick.
So are elephant trails.

FROM August 27 to September 2nd material has
been lumped to August 30th.

STOP 107: LWIRO R. FALLS: 2000m; OR 47 Km. N. BUKAVU.
30.VIII.57. (total = 3500)

Same as 26th of August.

KAVUMU = 246

STOP 108: ~~20 Km~~ S. SHOULDER MT. KAHUZI; 2000m; 4.IX.57.
(258) at the 20 Km sign from Kavumu. (total = 200)
In the bamboo forest zone. Small stream.

STOP 109: ^S SLOPE MT. KAHUZI: 1700m; 4.1X.57. (total=55)
(274) Camped here. almost identical to stop
108. Bamboo & mountain forest.

STOP 110: S. SLOPE MT. KAHUZI: 1900m; 5.1X.57. (total=400)
- few native clearings. small streams and
many rotting logs.

STOP 111: S. SLOPE MT. KAHUZI: 2200m; 5.1X.57. (total=500)
Bamboo forests. few meadows. small creek
with interesting Trichoptera larvae.

STOP 112 - Omit. Same as STOP 111: Camped here.

STOP 113: ^W S. SLOPE MT. KAHUZI: 1900m; 6.1X.57. (total=2)
Open savannah. Many giant lilies. Took
photos of Meloids eating flowers.

STOP 114: BUNYAKIRI: 1100m; 6.1X.57. (total= ¹²⁰⁰ 300)
Luhoko River canyon. Western shoulders of
Mt. Kahuzi. Some rain forest. A lot of
slash and burning on the slopes.
Two days collecting here.

BUNYAKIRI = (321) Banana plantations

STOP 115: 9 MI. N.W. BUNYAKIRI: 850m; 8.1X.57. (total=60)
(330) Small creek. Deep rain forest. with occasional
clearings for villages. Banana plants common.

STOP 116: 15 MI. N.W. BUNYAKIRI: 800m; 8.1X.57. (total=350)
(336) Dense rain forest. Many native clearings.
Wasp movies here.

Irangi, Luhoko R.
STOP 117: I.R.S.A.C., IRANGI: 900m; 10.1X.57. (total=2500)
(345) Dense rain forest: still in Luhoko River canyon.
lumped all dates from 9-12 to the 10th.
Irsac research station here for malaria and
tsetse flies. This is on the old Bukuru-Stanleyville
road.

STOP 118: 52 MI. S.E. WALIKALE: 700m; 13.1X.57. (total=125)
(5370) Road stop for lips on animal feces. Regrowth
rain forest near road.

STOP 119: 39 KM. S. WALIKALE: 700m; 14.1X.57. (total=500) ✓
(399) Camped here. Dense rain forest. Scene for the
filming of gorillas by the 1958 Int. Exposition.
F.I.S. CAMP

STOP 120: 12 MI. S. WALIKALE: 700m; 15.1X.57. (total=75)
(410) Road collecting of lips on feces. few bugs too.

(WALIKALE = 422)

STOP 121: 13 MI. E. WALIKALE: 775m; 15. IX. 57. (total = 100)

(435) Road coll. dung piles + urine spots. Dense forest, but many villages.

STOP 122: WALIKALE: 750m; 16. IX. 57. (total = 25)

(497) Stayed overnight in a hotel here. Walikale-Goma route has a bridge out. Mining area.

~~BUNYATI~~

~~BUNYATI~~

STOP 123: 15 MI. S. WALIKALE: 700m; 16. IX. 57. (total = 15)

(512) roadside spring. Dragon flies frogs, etc abundant. Hilly. swamps nearby. Cleared rainforest near the road.

STOP 124: Km. 153; WALIKALE-KAVUMU RD: 700m; 16. IX. 57

Gold mining region. Much surface stripping. Rainforest area. Many clearings (total = 50)

STOP 125 Omit. Same as Stop 117. This is at Km. 110 on the Kavumu-Walikale Rd. Camped here again.

STOP 126: Km. 94: KAVUMU-WALIKALE ROUTE: 900m; 17. IX. 57.

(573)

Same as stop 116. Combine (total = 125) material to STOP 116.

STOP 127: 16 MI. N. GOMA: 1450m; 19. IX. 57. (total = 75)

(762)

Stayed one night at Kwiro, one at Kisenji. Lower end of park Albert. Lava beds. Low forest growth. Rich black volcanic ash soil.

(GOMA = 746)

STOP 128: 52 MI. N. GOMA: ^{OR} RUTSHURU: 1475m; 19. IX. 57.

(798)

Same type region as stop 127. (total = 40) This is the Park Albert headquarters at Rutshuru. Some rain forest. Camped here.

STOP 129: 30 MI. N. RUTSHURU: 1050m; 20. IX. 57. (total = 40)

(828)

Typical east african veldt. Rivers + swamps about with hippo + elephants. Antelope + buffalo.

STOP 130: RWINDI, S. SHORE LAKE EDWARD: 21. IX. 57. (total = 150)

(955)

Camped here for 2 nights.

Typical east Africa. grasslands. + in spots, low bush. One patch of woods along Rwindi River.

B O N G O

2800 m;

STOP 131: 26 mi. S. LUBERO; 22. ^{1x}/₅₇. (total = 4)
(011) Camped here. Mostly eucalyptus and acacia
on hill tops. Regular forest in canyons. 2800 m;

STOP 132: 9 mi. S. LUBERO: 2150 m; 23. ^{1x}/₅₇. (total = 75)
(028) Still eucalyptus & acacia groves. Less of the
endemic forest in canyons here.

LUBERO = (037)

STOP 133: 13 mi. S. BENI: 1500 m; 23. ^{1x}/₅₇. (total = 24)
(084) Open area. Woodlands; hilly. Many grassy
open spots.

BENI = (097)

STOP 134: MUTWANGA: 1200 m; 23. ^{1x}/₅₇. (total = ⁵⁰⁰/₇₅)
(124) Park Albert. Base of Ruwenzori Range
and in the Semliki Valley. Bush & grass.
Few patches of woodlands.
Camped here for 2 nights.

All of stop 135 is on the Ruwenzori
Life zone readings are taken.

STOP 135: RUWENZORI: STANLEY GROUP: 1500 m; 25. ^{1x}/₅₇.

135.a
Same as
135-b.
Low down. grassy slopes up to the (total = 150)
1700 m mark. About 1750 m; the forest jungle
starts.

- Ruwenzori, Stanley group. 1850 m; 25. ^{1x}/₅₇.

135-b Forest jungle. steep climb. damp (total = 250)
to soggy ground. Nycterebid found on a Rousettus
bat.

- Ruwenzori, Stanley group. 2138 m; 25. ^{1x}/₅₇. (total = 45)

135-c Cabin for first night. Cleared section in
mountain forest. Night coll. mostly.

- Ruwenzori, Stan group. 2300 m; 26. ^{1x}/₅₇. (total = 16)

135-d
Same as
135-m
Upper edge of forest. beginning of the bamboo
zone. One or 2 tree heaths.

- R., Stan group; 2500 m; 26. ^{1x}/₅₇. (total = 30)

135-e Tree heath zone. Thick moss (2 1/2') covering
all ground. Moss is thick with Carabids,
saw bugs & roaches.

- R., Stan group; 3200 m; 26. ^{1x}/₅₇. (total = 30)

135-f still tree heath. trees taller. Much spanish moss
Same as type stuff on trees.
135 K

STDP 135; RUWENZORI, STANLEY GROUP; 3310 m; 26/IX/57.

135.g 2nd Rest Camp Mahangu Camp. (total = 50)

Still tree heath. Less moss on ground.

Rotting wood has scarabs.

- 135.h R., Stan grp.; 3500 m; 27/IX/57. (total = 25)
Moss still on ground. Tree heaths beginning to thin. Heath up to 3800 m;

- 135.i R., Stan grp.; 4000 m; 27/IX/57. (total = 125)
Lobelias and composites. Rotting lobelias are full of weevils. Lobelia start at 3850 m;

Final camp - Kiondo - at 4200 m; light snow and hail at 1:00 P.M. Went to the bottle alone at 4300 m, and further to 4460 m; Rocky.

Snow storm in night left snow 4 inches deep down to the 3900 m mark.

DOWN

- 135.j R., Stan grp.; 3800 m; 28/IX/57. (total = 60)
tree heath, composites & lobelias all together in a small canyon.

STDP 135: RUWENZORI, STANLEY GROUP; 3200 m; 28/IX/57.

135.k entirely tree heath zone. (total = 30)

Same as 135-f

135.l - R., Stan grp.; 2600 m; 28/IX/57. (total = 35)
Large trees occasionally. Just at the beginning of the bamboo. 2 1/2' moss layer on ground.

- 135.m R., Stan grp.; 2300 m; 28/IX/57. (total = 11)
Same as 135-d In the thickest of the bamboo range. Many of the forest trees mingle here.

- 135.n R., Stan grp.; 1900 m; 29/IX/57. (total = 65)
Forest jungle region; few open grassy patches.

- 135.o R., Stan grp.; 1500 m; 29/IX/57. (total = 500)
Same as 135-a Grassy slopes. Sweep net coll.

STDP 135: MUTWANGA: 1300 m; 29/IX/57. (total = 75)
Night collecting at the lights of the Ruwenzori Hotel at the base of the Ruwenzori

BENI = 6 (144)

B. CONGO

BENI = (144)

STOP 136: 37 mi. S. MAMBASHA: 950m; SEPT. 30/57. (total = ¹²~~50~~)
(214)

Camped here. Beginnings of Ituri forest.
Rain forest. New road. Many felled trees alongside.

STOP 137: 24 mi. S. MAMBASHA: 950m; Oct. 1/57. (total = 600)
(227)

Same as Stop 136.

MAMBASHA = 6 (251)

STOP 138: CAMP DE L'EPOLU; ^{OR}EPOLU; 950m; Oct. 2/57
(292)

Coll. here for 3 days. Stayed for (total = 1800)
3 nights at the Hotel here. Rain forest.
Elephants attract many flies & beetles.

STOP 139: MONT HOYO: ^{1250m;}~~5~~ Oct. 5/57. (total = 1350)

2 nights here. Coll. in cave also. found some
frogs in water in cave. Almost no eyes.
Cave was alive with roaches & katydids.

STOP 140: 2.3 mi. ^{S.W.}~~S.~~ NIOKA: 1700m; 8/X/57 (total = 40)
(533)

Small patch of indigenous forest. Many black
berry type bushes.

NIOKA = (556)

Camped between Nioka + Djugu

UGANDA

STOP 141 : 36 mi. W. PAK WACH; 1350m; 8/X/57 (total = 100)
(601) Savannah - open. High grass. Scattered thickets of trees.

STOP 142 : 25 mi. W. PAK WACH; 1100m; 8/X/57. (total = 4)
(612) Same as previous stops. 3 spiders + 1 mite all in one mite.

PAK WACH = (637)

(Somehow forgot Stop 143)
first skipped ^a number, that's all

STOP 144 : 27 mi. N. MURCHISON FALLS; 1050m; 8/X/57 (total = ²⁷⁵~~275~~)
(671) Camped here. Open grasslands. Much of the area has been burnt recently. Very few trees. *Cetonia* in mass in grass.

STOP 145 : PARAH, MURCHISON FALLS PARK; 800m; ¹⁰8/X/57. (total = ¹³⁰~~120~~)
(700) On the Victoria Nile. Edge of river is swampy. Thick beds of Papyrus + bladderwort. Sandy sections of shore are good coll. Camped here. 2 days coll. in part.

STOP 146 Same as stop 144
omit stop 146.

There is NO Stop 143.

UGANDA

STOP 147: 31 MI. S.W. GULU: 1100m; Oct. 11/57. (total = 50)
(768) Alcohol mix only. Coll. up in tree
under epiphytic orchids. Mainly auto.

STOP 148: 15 MI. S.W. GULU: 1175m; Oct. 11/57. (total = 150) ✓
(784) Sweep net coll. Savannah woodlands.
Very dry ground.

GULU = (799)

STOP 149: 9 MI. N. GULU: 1200m; Oct. 11/57. (total = 75)
(808) Area is a ^{natural} forest grove. Forest reserve
Caught one or Taratembird in knot hole.
some forest plantation

GULU = (814)

STOP 150: GULU: 1100m; Oct. 11/57. (total = 30)
Coll. at light of the goat light houses.

STOP 151: 33 MI. W. LIRA: 1100m; Oct. 12/57. (total = 40)
(847) Large swamp beside the road. Papyrus
Flowering lilies. water lilies

LIRA = 6 (880)

STOP 152: 13 MI. S.E. LIRA: 1150m; Oct. 12/57. (total = 200)
(893) Hot & dry. Waist-high grass. Palm trees
Sav. woodlands. Dense native populations.

KABERAMAIDO = (925)

STOP 153: 8 MI. N.E. KABERAMAIDO: 1175m; Oct. 12/57. (total = 300)
(933) Camped here. Mosquitoes are thick.
Savannah woodlands.

STOP 154: 10 MI. N.W. SOROTI: 1100m; Oct. 13/57. (total = 75)
(959) Dry woodlands. Large rock outcrops - granite
Baboons & ~~not~~ monkeys are thick.

SOROTI = (969) M. BALE (048)

STOP 155: 13 MI. N. ^{E.} M. BALE: 1300m; Oct. 13/57. (total = 75)
(061) Foot hills of Mt. Elgon. This is on the road
that now goes clear around the north slopes
of the mountain.

STOP 156: 37 MI. N.E. M. BALE: ¹⁴⁷⁰ m; Oct. 13/57. (total = 15)
(075) Beginnings of the first inclines.
Savannah woods. Few rocks. Quick stop.

UGANDA + ~~KENYA~~

STOP 157: N. ^WE. SLOPE MT. ELGON: 1875m; Oct. 13/57.
(080) Small waterfall. Rocky ledges. (total = 50)
few banana plantations. Bushes make
good sweep netting.

STOP 158: N. SLOPE MT. ELGON: 2050m; Oct. 13/57. (total = 200)
(105) Camped here. At the edge a forest reserve.
Few arithrina trees. Low grass on level spots.

STOP 159: N. SLOPE MT. ELGON: 2200m; Oct. 14/57 (total = 400)
(110) In dense mountain forest reserve.
Thick underbrush. About a half mile
from the Kapkwata Forest Station.

STOP 160: N. E. SLOPE MT. ELGON: 2000m; Oct. 14/57. (total = 175)
(127) Steep, rocky slopes. Low, dry grass. Low
woodlands and fairly open.

STOP 161:
(143)

KENYA

STOP 161: 9 mi. N. W. KITALE: 1950m; Oct. 14/57. (total = 42)
(143) Dry acacia & grasslands. few stones, but
poor collecting.

KITALE = 7(162)

STOP 162: 30 mi. S. E. KITALE: 1950m; Oct. 14/57. (total = 100)
(192) Small creek near some stands of dense
woodlands. In a canyon. good H₂O Beetle spot.

STOP 163: 38 mi. S. E. KITALE: 2100m; Oct. 14/57. (total = 60)
(200) Dry, rocky grasslands. Rolling hills. Good
spot for Tenebrionids.

^{AINABKOI}
STOP 164: 6.3 mi. ^{N. W.} ~~E~~ NAKURU: 2550m; Oct. 14/57. (total = ?)
(239) In the Ainabkoi Forest Reserve. Camped here.
Many cedar trees. No rocks on forest floor.

USE - Ainabkoi Forest, 2550m, X-14-57

STOP 165: TIMBOROA, 52 mi. N. W. NAKURU; 2700m; Oct. 15/57
(250) In the Timboroa forest. Bamboo & (total = 30)
conifer forest. Coll. mainly on some daisies at
the roadside.

NAKURU = (302)

KENYA

STOP 166: 3 MI. S.E. NAKURU: 1900m; Oct. 15/57. (total = 5)
(305) Dry rolling grasslands. Few rocks on one hill.

STOP 167: 17 MI. S.E. NAKURU: 1900m; Oct. 15/57. (total = 250)
(319) Rolling hills with rocky outcrops on top.
Many boulders on ~~the~~ slopes. Few trees.

STOP 168: 6 MI. E. NAIVASHA: 2300m; Oct. 15/57. (total = 2)
(351) Bush country, probably second growth.
Camped here. Extremely strong and cold winds
throughout the night.

NAIVASHA = 7 (345)

STOP 169: KERITA, 38 MI. N.W. NAIROBI: 2640m; Oct 16/57.
(378) Dense bamboo forests. Cool & windy (total = 150)
weather. Most insects on leaves of nettles.
1 snake & 1 vial alcohol.

NAIROBI = (416) - 2 nights here.

STOP 170: ATHI RIVER: 1530m; Oct. 19/57 (total = 200)
Camped here. low trees and grasslands.
E. A. savannah. Pool swamps make
good H₂O collecting.

KENYA

KAJIADO = (585)

STOP 171: 23 MI. S. KAJIADO: 1630m; Oct. 19/57. (total = 125)
(607) Camped here. Small range of hills.
Giraffe & hyenas here, also baboons. Now
within sight of Kilimanjaro. Dry savannah.
Dry season.

STOP 172: 9 MI. N. NAMANGA: 1300m; 20 Oct./57. (total = 23)
(628) Dry savannah. Coll. in dead tree. Alcohol
vials only. 2 beetles layered.

NAMANGA = (637)

TANGANYIKA BORDER

TANGANYIKA.

STOP 173: 12 MI. S. NAMANGA: 1425m; Oct. 20/57. (total = 150)
(649) Dry savannah. Dry season.

Alcohol vials only. few rocks.

STOP 174: 24 MI. S. NAMANGA: 1300m; Oct. 20/57. (total = 150)
(661) on the west base of Longido Mountain.
Dry sav. woodlands. all alcohol vials
except one butterfly layered.

STOP 175: 22 MI. N. ARUSHA: 1850m; Oct. 20/57. (total = 50)
(683) Grassy slopes on N.W. base of Meru Crater.
one small snake, too.

ARUSHA = (705)

STOP 176: 58 MI. W. ARUSHA: 1000m; Oct. 20/57. (total = 500)
(763) Water hole. dry grasslands. plains. This is
on the south side of the Kosiungu Hills.
Camped here.

STOP 177: N. SHORE LAKE MANYARA:
~~6.5 MI. W. ARUSHA: 1000m~~, 1000m; Oct. 21/57. 1000
(772) This is near Mto Wa Mbura. (total = 500)
Dense jungle forest. base of crater escarpment.

STOP 177
LABEL MADE: TANGANYIKA:
N. END LAKE
MANYARA
S.T.
1100m. 26. x. 57

STOP 178: S.E. SLOPE NGORONGORO CRATER: 1530m; Oct. 21/57.
(781) Top of first escarpment. Turned over (total = 35)
stones mainly. dry grasslands. Occasional tree.

STOP 179: S.E. SLOPE NGORONGORO CRATER. 2300m; Oct. 21/57.
(806) Forests & meadows. Now within (total = 75)
the Crater Park boundaries.

STOP 180: INSIDE, W. SLOPE NGORONGORO CRATER. 1850m;
Oct. 21/57. (total = 50)
Normally bare, grassy slopes. Now with eucalyptus
trees thinly planted. Camped here.

STOP 181 NGORONGORO CRATER FLOOR. 1800m; Oct. 22/57.
Coll. at the "Fig tree Kopje." (total = 500)

STOP 182: WINDY GAP, NGORONGORO CRATER. 2100m;
Oct. 23/57. (total = 125)
Hilly grasslands. NO trees. Many
large rocks.

STOP 183 ^W FLANK NGORONGORO CRATER: 1750m; Oct. 23/57.
This is at the "Olbabab." part of the (total = 1000)
crater. Dry, rocky, sloping savannah. 450
Camped here.

TANGANYIKA

STOP 184: ^ESERONARA, SERENGETI PLAIN: 1580m; Oct. 23/57.
Camped here. First rains of (total = 500)
the season. Stayed 2 nights. Took bats
in out house. ~~Sav.~~ open savannah.

STOP 185: NAABI, SERENGETI PLAIN: 1750m; Oct. 25/57.
~~small~~ large rock outcrop in (total = 100)
the sea of sand. bush + trees here.
mainly embittered.

STOP 186: E. GATE SERENGETI PARK: 1950m; Oct. 26/57.
Dry mountain forest. No rain here yet.

STOP 187: S. E. FLANK. NGORONGORO CRATER. 1600m; Oct. 26/57.
Dry grassy slopes. Stones beneath (total = 40)
the surface. No rain here yet. Waist high grass.

ARUSHA = 8(237) one night here.

STOP 188: ^{side}E. BASE. MT. MERU: 1500m; Oct. 28/57. (total = 24)
(260) Semidry, open country. Few stones. Fine
sanded soil is poor for bugs. Beginning
of the short rainy season.

TANG. TERR.

STOP 189: ^{side}E. BASE MT. MERU: 1630m; Oct. 28/57.
(262) Rain forest. just after a light (total = 200)
rain. Interesting frogs in creeks.

STOP 190: ^{side}E. BASE. MT. MERU: 1700m; Oct. 28/57. (total = 400)
(267) Dense rain forest. light rain few hours ago.
Many rotting logs. Many colobus monkeys.
Large trees with rough bark.

STOP 191: ^{side}N. E. BASE MT. MERU: 1500m; Oct. 28/57.
(274) Dry savannah. Slight hint that (total = 1000)
rain fell. Near Ngare Ngare. Many small
streams from Mt. Meru. Camped here.

MOSHI = 8(318)

STOP 192: 11 MI. E. MOSHI: 890m; Oct. 29/57. (total = 100)
(329) Dry savannah. with a light almost pumice-
like rock. No rain here.

STOP 193: 13 MI. E. MOSHI: 880m; Oct. 29/57. (total = 80.)
(331) Small creek. residual pools. Small gallery
forest in dry savannah plains. Riverine forest.

HIMO = (334)

TANG. TERR.

STOP 194: MAMBA, S.E. ^{side} BASE KILI MANJARO: 1440 m;
(344) Oct. 29/57. (total = 300)

Mountain rainforest. small creek. many
banana plantations.

KENYA

TAVETA = (361)

STOP

STOP 195: 2 MI. E. TAVETA: 840 m; Oct. 29/57. (total = 500)

(363)

Camped here. Riverine forest in dry sav. plains.

STOP 196: 9 MI. E. TAVETA: 950 m; Oct. 30/57. (total = 350)

(370)

Dry sav. region after short rain.

This is the Shorter Raining Season. few baobab
trees.

STOP 197: 45 MI. E. TAVETA: 1060 m; Oct. 30/57. (total = 1)

(406)

Dry sav. after recent rain. acacia trees

are mostly only.

have fresh green leaf sprouts. grass yellow & dry.

STOP 198: S. SLOPES TEITA HILLS: 1030 m; Oct. 30/57. (total = 100)

(420)

Banana & sugar cane plantations. Some
of the original bush acacia in spots only.

STOP 199: WESU, TEITA HILLS: 1170 m; Oct. 30/57.

(422)

Small creek. Mt.-Riverine forest. total = 300

Very near the "Coast Girls' School."

STOP 200: WUNDANYI, TEITA HILLS: ^{1450 m} NOV. 1/57. (total = 400)

(430)

Agricultural area. many eucalyptus groves.
Heavy rains. Stayed for 2 nights here.

* Correct the layer labels for here.
Heavy rains here

KENYA:

STOP 201: 3 mi. E. MAKTHU, TEITH HILLS: 1150 m;

(466)

NOV. 1/57. total = 125.

Dry, dense savannah. Heavy rain storm.
New leaf foliage on acacia.
Camped here. Flat top acacia.

STOP 202: 11 mi. S. MAKTHU: 1000 m; NOV. 2/57. (total = 2200) ✓
(505)

Camped here for 2 nights. Dense savannah
wood. Typical East African. Sandy soil.
Rock outcrop, granite, called "Mwangere" rain.

STOP 203: ~~K~~ 8 mi. W. VOI: 700 m; NOV. 4/57. (total = 25)
(544)

Savannah. Crystalline rocks. sandy, dusty
soil. Drier here than at STOP 202.

VOI = (552)

STOP 204: 49 mi. N.W. MOMBASA: 450 m; NOV. 4/57 (total = 75)
(597)

Dry savannah. No recent rains. Sandy soil and
crystalline rocks.

STOP 205: 31 mi. N.W. MOMBASA: 375 m; NOV. 4/57. (total = 125)
(615)

Dry savannah. rolling hills. Large sedimentary
rock on surface. Sandy also.

KENYA

230 m:

STOP 206: 10 mi. N.W. MOMBASA: NOV. 4/57. (total = 45)
(636)

Indigenous forest. Baobab & palm trees
also. Decline to lower flats here.

MOMBASA = (646) in + (649) out.

STOP 207: KWALE: 450 m; NOV. 5/57. (total = 500)
(668)

Lot of agricultural region, but with large areas
with the original forest. Dense rain forest.
Camped here for 2 nights.

Wale

Kwale

STOP 207: KWALE (SABLE ANTELOPE RESERVE) 450 m; NOV. 7/57.

Dense tall forest on hill tops. (total = 500)
Grassy slopes lower down. Dense undergrowth.

Chia Shumba Forest

STOP 208: SIMU BEACH, KWALE; 0 m; NOV. 7/57. (total = 300)
(705)

Indian Ocean. large baobab trees. Deep leaf
accumulation of leaves on beach make good coll.
Camped here on beach at the "Diani Mosque"

(Kwale = 720)

STOP 209: 28 mi. S.W. KWALE: 175 m; NOV. 8/57. (total = 250)
(748)

Savannah. Larger trees than normal or typical
Savannah. Recent rains have brought out fresh
leaves & new grass. This is on the Kwale-Tanga
route.

TANGANYIKA

(TANGA = 815)

STOP 210: 14 MI. W. TANGA: 100m; NOV. 8/57 (total = 150)
(829)

Camped here. Big sisal farm region.

Occasional coconut palm grove.

STOP 211: AMMANI. 850m; NOV. 9/57. (total = 1300)
(865)

Camped here from Nov. 9 - Nov. 11.

Dense mountain forest. One man-made lake. No light collecting.

STOP 212: 10 MI. S. ^E AMMANI: 160m; NOV. 11/57 (total = 100)
(875)

Tall, dense forest in river canyon. Surrounding mountains are also heavily forested.

STOP 213: AMBONI CAVES, TANGA: 40m; NOV. 11/57. (total = 30)
(922)

Limestone caves about four miles N. Tanga.

One bat only.

STOP 214: 10 MI. E. KOROGWE: 300m; NOV. 11/57. (total = 100?)
(974)

Camped here. Sparse tall forest with thick undergrowth. flat ground.

KOROGWE: (8984)

TANGANYIKA

(MOMBO = 010)

STOP 215: 2 MI. E. MOMBO: 550m; NOV. 12/57 (total = 50)
(612)

Dry, steep, sparsely treed slopes. Occasional rocky outcrops. Usambara Mts on the way to Rukoto from Momba.

STOP 216: FOREST RES., LUSHOTO: 1300m; NOV. 12/57. (total = 10)
(633)

On the Rukoto-Momba road. Tall, dense forest with heavy undergrowth. Heavy rains during the day.

STOP 217: 6 MI. E. MOMBO: 830m; NOV. 12/57. (total = 100)
(647)

Same type region as STOP 215. More trees here in small canyon. Large granite boulders.

(MOMBO = 053) (KOROGWE = 077)

STOP 218: 31 MI. S.W. KOROGWE: 620m; NOV. 12/57. (total = 400)
(108)

Dense sav. woods. Large trees. Green grass because of recent rains. recent burnings. Camped here.

HANDENI: (118)

STOP 219: 15 MI. S. HANDENI: 630m; NOV. 13/57. (total = 75)
(133)

Dry, burnt, woodlands after rains. Tightly-packed sandy soil. Trees are charred. grass burnt to the roots.

TANIGAWA

STOP 220: MZINHA, 40 MI. S.W. HANDENI: 475m; NOV. 13/57 (158)
Milly. Dry sav. after recent rains. Shorter raining season. (total = 50)

STOP 221: 54 MI. S.W. HANDENI: 400m; NOV. 13/57. (172) (total = 50)
Near the town of Lusonge. Savannah after light recent rain. Tightly packed sandy soil. Burnt-over recently.

STOP 222: MHONDA, 62 MI. S.W. HANDENI: 400m; NOV. 13/57. (180) (total = 125)
Dense forest. some agricultural clearings. Apparently much groundwater. 50-60' trees. No burnings recently.

STOP 223: 15 MI. N.W. MOROGORO: 400m; NOV. 13/57. (227) (total = 225)
Camped here. Recently burnt-over savannah. Overnight rains, but dry ground by 9:00 AM. Many trees dead because of dry soil.

MOROGORO = (242 in) + (249 out)

BUNDUKI

STOP 224: BUNDUKI, ULUGURU MTS.: 1200m; NOV. 14/57. (276) (total = 800)
Remnants of old mountain forest. Native agriculture has cut back the forest till it is now only on the mountain tops. Introduced pine + eucalyptus. Daily and evening rains. Camped here.

MGETA, ULUGURU MTS.; 800m; NOV. 15/57. (total = 35)
STOP 225: ~~1 MI. N. MGETA:~~ (285)
Rocky canyon, burnt grassy slopes. Occasional baobab tree. This is on the Mgeta-Mulali road

STOP 226: 20 MI. S.W. MOROGORO: 450m; NOV. 15/57. (305) (total = 175)
Iringa-Morogoro Rd. Burnt-savannah. Sandy soil, rocks below surface. Recent burning and recent rains.

MOROGORO = (285) computed.

STOP 227: 51 MI. S.W. MOROGORO: 500m; NOV. 15/57. (336) (total = 75)
Iringa-Morogoro Rd. Savannah, recent rains. Shorter Raining Season. Occasional thickets with buffalo. Rich elephant dung fauna.

STOP 228: 82 MI. S.W. MOROGORO: 530m; NOV. 15/57. (367) (total = 125)
Small rain creek in canyon. Area well burnt-over recently. Rich water beetle + snail fauna in rock pools. Near Iringa-Morogoro Rd.

STOP 229: 91 MI. N.E. IRINGA: 475m; NOV. 15/57. (377) (total = 25)
At Ruaha River canyon. Savannah on steep hills. Baobabs + acacia are plentiful. No recent rains. Riverine forest. baobabs plentiful.

230
STOP 229: 74 MI. N.E. IRINGA: 475m; NOV. 15/57. (total = 20)
(377)
(394) Gt. Ruaha R. Canyon. Steep hills & dry
savannah. baobab & acacia. No recent rains

STOP 231: 52 MI. N.E. IRINGA: 575m; NOV. 15/57. (total = 700)
(416) Camped here. ^{LUKOSI R.} ~~Rt. Ruaha R.~~ canyon. Dry.
No rains. Savannah. Embioptera.

IRINGA = (468)

STOP 232: 6 MI. N. IRINGA: 1475m; NOV. 16/57. (total = 50)
(474) Dry rocky hills. Savannah. Recent burning.
NO RAIN.

Daily rains on STOP 245-247.

STOPS 238-247 - rains daily.

STOP 233: 30 MI. N. IRINGA: 1200m; NOV. 16/57. (total = 60)
(498) Dry sav. woods. NO RAINS: Small rocky hill.

STOP 234: 71 MI. S. DODOMA: 1750m; NOV. 16/57 (total = 200)
(551) Valley flats, bordered by savannah woods &
few rocky hills. Near a settlement called
"Kisima". Camped here.

STOP 235: 12 MI. S. DODOMA: 1100m; NOV. 17/57. (total = 25)
610 Dry, rocky, hilly sav. woods. No rains

DODOMA = 9(622)

STOP 236: 2 MI. N. DODOMA: 1050m; NOV. 17/57 (total = 15)
(624) Dry & rocky savannah. No rain. Large granite
hill just N. of town near the air strip & radio
transmitter. Good coll, but stayed only 15 minutes

STOP 237: 38 MI. N. DODOMA: 1250m; NOV. 17/57. (total = 75)
(660) Large boulders in hilly sav. region. Some
areas are burnt. NO rain.

KOLO = (732)

STOP 238: 4 MI. N. KOLO (114 MI. N. DODOMA) 1700m; NOV. 17/57.
(736) Camped here. Low, dense hill top (total = 1000)
forest. Cool night, but NO rain.

BABATI = (780)

STOP 239: 13 MI. S. BABATI: 1550m; NOV. 18/57. (total = 300)
(767) Sub. forest region on the West Escarpment
of the Rift Valley.

TANGANYIKA

STOP 240 : 6 MI. N. BABATI: 1150m; NOV. 18/57. (total = 25)
(786) near small volcanic cone. large boulders strewn about. Burnt-grasslands.

STOP 241 : 2 MI. W. ARUSHA: 1300m; NOV. 18/57. (total = 75)
(859) Volcanic boulders. grasslands + hilly. No burning recently. Dodoma-Arusha Highway

ARUSHA = (880 in) + (883 out)

STOP 242 : 6 MI. W. NGARE NANYUKI (N. BASE MT. MERU)
(606) Hilly + sloping 1500m; NOV. 19/57. (total = 200)
grasslands. Rocky creek gorge. N. Base of Mt. Meru.

(Next stop - take 16 miles off speedometer)

STOP 243 : 30 MI. N. ARUSHA: 1300m; NOV. 19/57. (total = 100)
(933) granite rock hill in open savanna. Rain.

STOP 244 : LONGIDO: (46 MI. N. ARUSHA) 1300m; NOV. 19/57.
(949) Base of Longido Mtn at the filling station
Puddle of H₂O. Open, hilly savanna

KENYA

STOP 245 : NAMANGA: (K.C. - TANG. BORD) 1300m; NOV. 19/57.
(970) a few hundred yards from the (total = 250)
hotel on the eastern slopes of the Oldoinyo Arok Hills. Hilly, sandy soil; savanna.

STOP 246 : ~~26~~ 26 MI. S. KAJIADO: 1550m; NOV. 19/57. (total = 125)
(999) In the Lokolokit Hills. Open savanna.
Hilly. Camped here.

KAJIADO = (025)

STOP 247 : 11 MI. N. KAJIADO: 1550m; NOV. 20/57. (total = 7)
(036) On the Kapiti Plains. Small patch of large boulders in grasslands.

STOP 248 : ATHI RIVER: 1550m; NOV. 20/57. (total = 1000)
(056) Camped here. Same as STOP 170. Rain.
Open sav. rocky outcrops.

STOP 249 : NGONG HILLS, (NAIROBI - MARGARI RD) 1780m; 22.XI.57.
(130) This is some 23 miles from the total = 125
Town of Nairobi. Small rocky patch on the east face of the rift escarpment. Low thorn scrub. Lava rock. grassy hills.

NAIROBI = 107

KENYA

STOP 250: NGONG HILLS, (NAIROBI - MAGADI RD) 1500m; NOV. 22/57. (total = 30)
(135) Some 28 miles from Nairobi.

Savannah, but no grass on ground. gravel type soil. lava ~~rock~~ rocks. river bed in the wet season.

STOP 251: RIFT VALLEY, 25 MI. N. MAGADI: 900m; NOV. 22/57.

(152) Camped here. NO rain (total = 40)

Side canyon of Rift. Rocky hills & low thorn scrub. Much waist-high grass.

MAGADI 2 (177 in) & (178 out)

RAIN TODAY - NOV. 23/57.

STOP 252: 8 MI. N. MAGADI: 775m; NOV. 23/57. (total = 75)

(186) Nairobi - Magadi Rd. Mimosa bushes flowering and seeding. Cetonias in flowers. Rocky, volcanic soil. Open, hilly savannah. Rain. Small hill in main Rift Valley.

STOP 253: 12 MI. N. MAGADI: 830m; NOV. 23/57. (total = 30)

(189) Camped here. gravel soil. grass in spots. Open bush & savannah. hilly: rain

STOP 254: 33 MI. N. MAGADI: 1000m; NOV. 24/57. (total = 75)

(211) Nairobi - Magadi road. gravel soil. large volcanic boulders. Rain. Rugged hills & thorny bush

KENYA

STOP 255: 17 MI. S.W. NAIROBI: 1800m; NOV. 24/57. (total = 125)
(229)

Small creek in rolling grassy hills. Creek flows only during the rains. Recent rain. Nairobi - Magadi Rd.

STOP 256: 6 MI. S.W. NAIROBI: 1725m; NOV. 24/57. (total = 35)
(240)

Endemic forest at the S.W. corner of Nairobi National Game Park. Nairobi - Magadi Rd. Rain.

~~STOP 257~~ NAIROBI = (247)

STOP 257: KING FISHER CYN, NAIROBI PARK. 1600m; NOV. 24/57.

Grasslands ^{on} the rim of the (total = 40)
Mbakathi River. Nairobi game Park.

STOP 258: ATHI RIVER: 1500m; NOV. 24/57. (total = 125)

Same as STops 170 & 247.

NANYUKI = (418)

STOP 259: 24 MI. N.E. NANYUKI: 1950m; NOV. 25/57. (total = 25)
(442)

N. Slopes of Mt Kenya. Mountain rain forest. Rain most of day. Many coniferous trees. Camped here

HEAVY RAINS NOW

Shorter Rainy season

STOP 260: 4 MI. S. ISIOLO: 1250m; NOV. 26/57. (total=1000)
(463) Slow slopes; East African Sav. Torrential rains. Fresh grass + leaves everywhere. In spots, volcanic boulders on surface. Good collecting under these. Camped here.

ISIOLO = 467 alt. = 1075m;

STOP 261: 19 MI. E. THOMSON'S FALLS: 1925m; NOV. 27/57.
(556) Open savannah. Hill top. Riverine forest below at the creek. Heavy rain. (total=100)

THOMSON'S FALLS = (575)

STOP 262: 19 MI. N.E. NAKURU: 2600m; NOV. 27/57. (total=150)
(595) Mountain rain forest. Dense bamboo. Coll. mainly in roadside flowers.

NAKURU = (614) in + ⁽⁶²²⁾~~(614)~~ out

STOP 263: N. SHORE LAKE NAKURU: 1750m; NOV. 27/57. (total=100)
Camped here. Volcanic sand. Swamp + shore grass.

KENYA

(NAKURU = 622)

STOP 264: 25 MI. N.W. NAKURU; (KISUMU-NAKURU RD) 2300m;
(647) Endemic forest. near NOV. 28/57. (total=200)
Town of Kolo. Kenya. This is on the Escarpment hill.

STOP 265: 28 MI. E. KISUMU: 1300m; NOV. 28/57. (total=20)
(704) No recent rains here. Flat ground sloping off towards Lake Victoria. Small farms + open sav. Scattered rocks on surface.

KISUMU = (732)

STOP 266: Maseno, 17 MI. N.W. KISUMU: 1550m; NOV. 28/57.
1 paussid This is the C.M.S. Hospital Mission. (total=1)
Formlands + eucalyptus groves.

STOP 267: KAIMOSI MISSION, 27 MI. N.E. KISUMU: 1650m; NOV. 29/57.
Endemic forest. Coll in Swamp + creek canyon. Felled trees. Slept here. Quaker Mission. (20.7.2. 1000)

STOP 268: S. NANDI FOR., N.E. KISUMU: 1850m; NOV. 29/57. (total=200)
On the Kapsabet-Kisumu Rd. and only a few miles from Kapsabet. Endemic forest somewhat disturbed.

UGANDA

STOP 269: 6 MI. W. BUSIA: 1150m; DEC. 1/57. (total=100)
(933) Tropical endemic forest. dense undergrowth.
Busia is on the Uganda Kenya Border, and is
south of Tororo.

BUSIA = (927)

JINJA = (997)

~~STOP 270~~
STOP 270: 10 MI. W. JINJA: 1700m; DEC. 1/57. (total=800)
(007) Endemic forest. (Nana-something) Very dense
tropical. large trees. - nothing logs. + loose bark.

KAMPALA = (047)

STOP 271: BUTO FOR., 15 MI. W. KAMPALA: 1700m; DEC. 1/57.
(062) Endemic forest. Camped here (total=125)
on the old road. Muddy soil.

MITYAMA = (088)

STOP 272: 17 MI. E. MUBENDE: 1700m; DEC. 2/57. (total=25)
(127) Bush, low; swamps between the low hills.
Banana crops scattered. recent rains.

UGANDA

STOP 273: 7 MI. E. MUBENDE: 1250m; DEC. 2/57. (total=100)
(137) Combination bush + meadows. Rolling
hills; sandy base soil with dirt + rocks.

MUBENDE = (144)

STOP 274: 7 MI. W. MUBENDE: 1250m; DEC. 2/57. (total=35)
(152) Small dense swamp forest. sand base soil
with some dirt clods.

FORT PORTAL = (243 in) + (247 out) Hotel here

STOP 275: KASENYI, LAKE GEORGE: 950m; DEC. 3/57. (total=400)
Queen Elizabeth Park. Savannah. Some
crater pits with salt water. Kasenyi is
at the U.N. Fisheries Institute.

STOP 276: LAKE KATWE, Q.E. PARK. 950m; DEC. 4/57. (total=175)
Lake Katwe is on the N.E. shores of Lake Edward.
Savannah + grasslands, euphorbia forests all
in same region.

STOP 277: MARAGAMBO FOR., Q.E. PARK.: 1000m; DEC. 4/57. (total=400)
Dense forest. Euphorbias + acacias, too. This is
in the S.W. corner of Queen Elizabeth Park.

UGANDA

STOP 278: 16 MI. N.W. BUSHENYI: 1450M; DEC. 6/57. (total = 175)
(548) Small patch endemic forest amid native farms and villages. No rocks. Rounded hills. (peneplane)

BUSHENYI = (564)

MBARARA = (599)

STOP 279: 11 MI. S.E. MBARARA: 1350M; DEC. 6/57. (total = 400)
(610) Savannah Recentrain. Camped here. Waist-high grass. In the Murchison Game Reserve. Good day coll, but poor night coll.

STOP 280: 16 MI. S.E. MBARARA: 1375M; DEC. 7/57. (total = 6)
(615) Same as stop 279, but here is a roadbank for *Lumbrigitis*

STOP 281: 34 MI. S. MBARARA: 1200M; DEC. 7/57. (total = 150)
(633) This is approx. 8 miles E. of Kikagati (641), a small mining settlement. River ~~to~~ Kagera Canyon. Numerous surface rocks. Many large trees. Hills above are open savannah

RUANDA

KAKITUMBURA = (663)

STOP 282: 18 MI. S. KAKITUMBURA: 1475M; DEC. 7/57. (total = 800)
(681) Western edge of the Kagera Park. Singular rocky outcrop in hilly grasslands + savannah

STOP 283: GABIRO, KAGERA PARK. ^{1325M} DEC. 8/57. (total = 800)
Grasslands + open savannah. Road coll. in puddles + grass sweeping. Stayed here for 2 nights

NB // Speedometer on the Blink. So reading will have to be in Kilometers or best approximations.

STOP 284: 6 MI. S. GABIRO: 1475M; DEC. 9/57. (total = 2)
One gopher + one tick. tick on ground. This is on the Gabiro - Kisiguma Rd. Bush; sav; farms

STOP 285: 40 KM. E. KIGALI: 1575M; DEC. 9/57. (total = 1100)
Rolling pasture land + brush. Rocks on surface. Many paussids from Pheidole ants.

STOP 286: KIGALI: 1600 M; DEC. 9/57. (total = 7)
Hilly and grassy with many valleys having papyrus swamps. Many eucalyptus trees.

RUANDA

STOP 287: 2 Km. N. ASTRIDA: 1625m; DEC. 9/57. (total = 21) ✓
Camped here. Large swamp nearby. Large
groves of eucalyptus on the hills surrounding.
Poor light coll.

STOP 288: 60 Km. W. ASTRIDA: 2400m; DEC. 11/57 (total = 60)
Steep hills with endemic forest. The forest is
dense, tall, cool & damp. Tuta forest. Rains
Roadside coll.

STOP 289: 78 Km. W. ASTRIDA: 2350m; DEC. 11/57. (total = 150)
Very interesting place. Tree heaths in some
zones. Epiphytic growth on the forest of the
Western slope, but not on the eastern.
Dense forest. Moss & vine hanging trees.

STOP 290:

B. CONGO

STOP 290: LWIRO, 47 Km. N. BUKAVU: 1650m; DEC. 11/57.
Same as Stop 97 + 106 (total = 14)

STOP 291: TSHIBATI (LWIRO); 47 Km. N. BUKAVU: 1950m; DEC. 15/57
Combined all days here from (total = 1500)
Dec. 12 - Dec 18th
Same as Stop 107

Lwiro River, 47 Km. N. of BUKAVU, 1950 M

STOP 292: BUNYAKIRI, KIVU DIST: 1200m; DEC. 20/57. (total = 17)
Same as Stop 114

STOP 293: 39 Km. S. WALIKALE, KIVU: 700m; DEC. 25/57.
One week collecting. Same (total = 5000)
as Stop 119 Rain forest. Rain every day.
This is the Old F.I.S. Camp. This is near the
junct of Kabunga and on the road to Uten.

STOP 294: KABONGA, 45 Km. S. WALIKALE: 850m; DEC. 29/57.
Same type region as Camp F.I.S. (total = 16)
but ground is severely ground scarred, scarred by
mining efforts. Dense rainforest.

STOP 295: IRANGE, I.R.S.A.C., 900m; DEC. 29/57. (total = 28)
Same as Stop 117, but in a rainier season
Popilia antimachus here. River in flood.

B. CONGO.

REPEAT

#

5 TOP 291: TSHIBATI (LWIRO); 47 km N. BUKHUU; 1950 m;
291-5 humped several JAN 3/58 ~~DEC 3~~ (total = 1200)
days together here.

REPEAT

#

291-6 Jan. 4, 1958 - 1650 m.

STOP 296: 12 mi. N. UVIRA: 920 m; JAN 5/58 (total = 40)
(174) grassy savannah; Rocky outcrops in spots.
Western slopes of the Albertine Rift.
small ~~indig~~ indigenous trees & eucalyptus.
Just before you reach the valley floor.

UVIRA (186)

~~STOP 297~~

URUNDI

STOP 297: USAMBURA: 800 m; JAN 6/58 (total = 5)
City proper. Slept here in "Hotel Central."

USAMBURA = (225)

STOP 298: 30 mi. S. USAMBURA: 800 m; JAN 6/58 (total = 125)
(255) Agricultural land on eastern shores of Lake Tanganyika.
On the Usambura - Nyangahae Rd. Camped here.

6 mi. N.
STOP 299: ~~30 mi.~~ RUMONGE: 780 m; JAN 7/58 (total = 200)
(263) Sav. woods near lake shore. Rich dung fauna
here. All Scarabs & Sarcophagids taken from
human feces. Recent rain.

RUMONGE = (269)

STOP 300: 6 mi. S. RUMONGE: 800 m; JAN 7/58 (total = 100)
(275) Sav. woods on lake shore. Steep banks & hills.

NYANZA
STOP 301: 13 mi. N. ~~NYANZA~~ LAC: 800 m; JAN 7/58. (total = 40)
(286) Combination of Sav. woods & native agriculture.
Apparently a large alluvial flat on lake shore.

URUNDI

STOP 302: 9 MI. N. NYANZA LAC: 800m; JAN 7/58. (total = 300)
(290) Sav. woods on very steep slopes. Recent rain.
Many rocks on surface in spots. Lake shore.

NYANZA LAC = (299)

³⁰³
STOP 303: 5 MI. E. NYANZA LAC: 870m; JAN 7/58 (total = 10)
(304) Woodlands. gentle hills & slopes. This is the
Nyanza lake - Bururi Rd over the mountains

STOP 304: 19 MI. S.E. BURURI: 1550m; JAN 7/58 (total = 125)
(334) Camped here. Steep grassy hills. many hills
have rocky outcrops. all trees are introduced
here. - eucalyptus + cypress.

STOP 305: 18 MI. S.E. BURURI: 1600m; JAN 8/58 (total = 100)
(335) hilly grasslands. Barren, grassy hills.
Eucalyptus + cypress line the road.

STOP 306: 15 MI. S.E. BURURI: 1850m; JAN 8/58. (total = 50)
(338) Same as STOP 305.

BURURI = (353)

URUNDI

BURURI = (353)

~~STOP 307: 2 MI. W. BURURI: 900m; JAN 8/58. (total = 200)~~
~~(355) DENSE sav. woods. Sandy soil. tall trees~~
~~but with a low (V) and not a (Y) shape~~
~~Camped here.~~

STOP 307: 2 MI. W. BURURI: 1710m; JAN 8/58. (total = 50)
(355) Mountain forest in canyon. large tree ferns
in the undergrowth. Grassy hills above. Rain.

STOP 308: 16 MI. W. BURURI: 900m; JAN 8/58. (total = 200)
(369) Dense sav. woods. sandy soil. Tall trees, but
with a low crotch (V) and not (Y)
Camped here.

B. CONGO

NB

STOP 309: John W. McReynolds joined the party here at STOP 309. Use tri named labels for her. and on till further notice.

STOP 309: UVIRA: 800m; JAN 10/58. (total = 30)
Coll mostly at the lights of the Hotel du Lac.
Stayed at the S. R. S. B. C. accommodations.

UVIRA = (446)

STOP 310: 26 mi. S. UVIRA: 800m; JAN 10/58. (total = 100)
(422) Small patch of original forest near the lake's shore. Also banana plantations about.

FIZI = (521)

STOP 311: 5 mi. S. FIZI: JAN 10/58. 1320m; (total = 100)
(526) Dense sav. woods. deep green grass under the trees. Camped here. Rains.

STOP 312: 13 mi. S. FIZI: 1300m; JAN. 11/58. (total = 225)
(534) Dense woodlands. Sandy soil. flora different from STOP 311. Few vines hanging from some trees. Rich under grass growth.

B. CONGO

LUAMA = (569)

STOP 313: 55 mi. S. FIZI: 850m; JAN 11/58. (total = 150)
(581) Somewhat an agricultural region. This STOP can also be "12 mi. S. LUAMA". Some patches of the original dense jungle forest left in the deeper ravines. Sandy soil.

STOP 314: 70 mi. N. ALBERTVILLE: 1150m; JAN 11/58. (total = 125)
(613) Also "40 miles N. Lugogo". Camped here.
West side of the western edge of the Albertine Rift.

STOP 315: 48 mi. N. ALB'VILLE: 1200m; JAN 12/58. (total = 20)
(635) Also some "19 mi. N. Lugogo". Remnant gallery forest in small canyon. Almost crowded out by African Agriculture.

ALBERTVILLE = (683 in) + (685 out)

STOP 316: 16 mi. S.W. ALB'VILLE: 1010m; JAN 12/58. (total = 100)
(701) Large creek, small waterfall. Riverine forest. sandy soil.

STOP 317: 45 mi. S. ALB'VILLE: 1350m; JAN. 12/58. (total = 125)
(730) Camped here. Low bushes & open savanna. Occasional riverine forest. Apparently an eroded table land.

STOP 318: 69 MI. S. HAB'VILLE: 1320m; JAN 13/58. (total = 200)
(756) Creek. bush & savannah. Here are palms. most
creeks have none.

STOP 319: 47 MI. N. KAPONA: 1430m; JAN. 13/58 (total = 2)
(776) Bush country. 2 legs on roadside.

STOP 320: 42 MI. N. KAPONA: 1520m; JAN. 13/58. (total = 350)
(781) Manioc clearing in tall sav. woods.
Deep grass. Many logs. Heavy rain. Snake.

STOP 321: 27 MI. N. KAPONA: 1720m; JAN. 13/58 (total = 30)
(796) Open bush. Dense bush in creek canyons.

STOP 322: 10 MI. N. KAPONA: 1770m; JAN 13/58 (total = 400)
(813) Bush & savannah. A few miles further south,
the area becomes rolling grasslands.

KAPONA = (823)

STOP 323: 10 MI. S. KAPONA: 1570m; JAN 13/58. (total = 400)
(833) Camped here. Combination bush and open
savannah. Large cattle farm "Colukkat" in
this region.

← - 4 miles for a detour.

STOP 324: 23 MI. S. KAPONA: 1650m; JAN 14/58. (total = 12)
(850) Rolling, grassy hills. Small rocky outcrop.

STOP 325: 27 MI. S. KAPONA: 1400m; JAN 14/58. (total = 125)
(854) Step, hilly, sav. woods. This is half way down
a steep incline that falls from 1600m to 1200m;
large cliffs in nearby creek gorge.

STOP 326: 54 MI. S. KAPONA: 1380m; JAN 14/58. (total = 35)
(881) Burnt-over sav. woods. Cloudy weather &
rain made poor collecting.

STOP 327: 34 MI. N. PWETO: 1050m; JAN 14/58. (total = 125)
(899) Kapona - Pweto Rd. near the junction at Kikere.
Tall sav. woods. Dense. light coll. is poor, so is
daytime coll. Camped here.

PWETO = (933)

STOP 328: SOURCE, LUVUA RIVER. 900m; JAN 15/58 (total = 1)
Source is near Pweto. one mid of Trichoptera
only.

B. CONGO

STOP 329: 8 mi. S.W. PWETO: 1080m; JAN 15/58. (total = 360)
(941) Dry sav. woods. Flat, sandy ground.

STOP 330: 20 mi. S.W. PWETO: 1300m; JAN 15/58 (total = 65)
(953) Small clear creek. in heavy agricultural area.
Sandy soil. Sav. woods at distance from road.

LUANZA = (950)

STOP 331: 8 mi. W. LUANZA: 1330m; JAN 15/58. (total = 210)
(962) Camped here. Luanza is about 20 odd miles
S.W. of Pweto. Dry sav. woods. One snake
in tree. Rolling hills + sandy soil.

STOP 332: 18 mi. W. LUANZA: 1300m; JAN 16/58 (total = 125)
(968) Sav. woods, dry, sandy, and much the same
as the previous stop. Few large trees.

STOP 333: 44 mi. E. KILEBA; KILEBA-LUANZA RD: 1110m; JAN 16/58
(919) Dry sav. woods, but drier + sparser (total = 125)
than (331) or (332) flatter ground with a more
claylike texture.

KILEBA JCT = (063)

B. CONGO

MITWABA = (078)

STOP 334: 10 mi. S.W. MITWABA: 1570m; JAN 16/58. (total = 175)
(988) Camped here. Rolling hills. Grass + sparse,
low bush on road from Mitwaba to
Lusanga, Upemba Park Headquarters.

STOP 335: LUSANGA, PARK UPEMBA: 1800m; JAN 17/58. (total = ²⁰⁰~~200~~)
Park headquarters. Rolling hills, mostly
grassy. occasional patches of bush.

STOP 336: MUYE, PARK UPEMBA: 1570m; JAN 17/58. (total = 140)
Slopes of the Muye River. Bush, arcthrina,
and grassy hills. Camped here.

STOP 337: MUNOWE; PARK UPEMBA: 1450m; JAN 18/58.
Riverine forest in step, rocky canyon. (total = 200)
Crossing down into the Rufira R. Canyon.
Table land above is mostly grassy.

STOP 338: MUNOWE, PARK UPEMBA: 750m; JAN 18/58. (total = 100)
Sav. woods on Rufira River ~~canyon~~ Valley floor.

STOP 339: MUNOWE, PARK UPEMBA: 850m; JAN 18/58 (total = 40)
a clear-flowing creek at the base of the Rufira
River wall. Small patch of Riverine forest.

STOP 340: MUNOWE, PARK UPEMBA: 1300m; JAN 19/58.

Camped here. Small creek with (total = 450)
riverine forest. Hilly and rocky. Few patches
of thick scrub + woodlands.

STOP 341: LAKE UPEMBA: UPEMBA PARK. 700m; JAN 19/58. (total = 60)

Coll. mainly between the Rufira R. and Lake
Upemba. Grasslands + bush.

~~STOP 342 - omit, same as STOP 335.~~

~~LUSINGA =~~

STOP 342: 32 MI. W. LUSINGA; PARK UPEMBA: 1400m; JAN 20/58.

(176) Grasslands on a plateau. Bushes (total = 100)
at plateau (mesa?) edge. No Sav. woods. Sweeping
only.

STOP 343: 24 MI. W. LUSINGA: P.U.; 1710m; JAN 20/58. (total = 100)

(184) Rolling grasslands. Coll. mostly an animal
dung in road. Movies here.

LUSINGA = (208)

(SAMPWE = (253))

STOP 344: 4 MI. S. SAMPWE; 980m; JAN 20/58. (total = 375)

(257) Camped here. High grass savanna. Flat
ground + sandy soil. W. Base of Kundelungu
Plateau

STOP 345: 17 MI. S. SAMPWE; 1000m; JAN 21/58. (total = 350)

(270)

High grass savanna. Coll. mostly by sweeping
and picking stuff off the grass.

MUME = (277)

STOP 346: 69 MI. S. SAMPWE; 980m; JAN 21/58 (total = 350)

(322)

Camped here. High grass savanna. Still at
base of the Kundelungu Plateau. 45 miles S. of
Mume. and about 3 miles S. of the Rufira R. Xing.

STOP 347: 13 MI. N. KIENGE; 980m; JAN 22/58. (total = 50)

(331)

High grass savanna. Trees rather denser
than usual. flat sandy ground.

KIENGE = (348)

STOP 348: KIENGE; 980m; JAN 22/58. (total = 25)

(348)

High grass sav. Very little undergrowth except
for the grass.

STOP 349: 27 MI. S. ^E KIENGE; 1150m; JAN 22/58. (total = 125)

(374)

Hilly, sandy-soiled Savanna. Ground is
only patchy with grass. No leaf mould on ground.
Rain.

B. CONGO

Jct. - E'VILLE - KASENGA RD = (397)
- 13 miles for trip to Katofio. (397-410)

STOP 350: ³⁷39 MI. N.E. E'VILLE; 1225m; JAN 22/58. (total = 250)
(425) Camped here. High grass savannah. Thin tall trees, but thickly growing. Huge termite hills. Rain.

ELISABETHVILLE = (462)

N.B

Johnnie McReynolds (J.W. McREYNOLDS)
left the party at Elisabethville.

STOP 351: E'VILLE; 1280m; JAN 23/58. (total = 350)
Coll. at the N. + N.E. edges of town. Small forest. as most large trees are taken out. Huge termite hills. Camped here. Rain.

STOP 352: AIRFIELD, E'VILLE; ^{1350m}~~1300m~~; JAN 26/58. (total = 300)
Sabena Air Port. Camped here in a grove of planted conifers. poor coll. generally.

STOP 353: 30 MI. S.E. JADOTVILLE; 1250m; JAN 27/58. (total = 125)
(618) Region very similar to E'ville, except for small rounded hills. High grass savannah. Sandy soil.

JADOTVILLE = (648)

STOP 354: 7 MI. N.W. JADOTVILLE; 1350m; JAN 27/58. (total = 300)
Camped here. Near the airfield. Same environment here as in E'ville. Same life zone as E'ville.

STOP 355: 47 MI. E. KOLWEZI; 1380m; JAN 29/58. (total = 25)
(733) Short stop. Cleared forest + sandy stream. Large rock outcrops beside the road.

STOP 356: 35 MI. E. KOLWEZI; 1500m; JAN 29/58. (total = 300)
(745) Some excellent coll. in decaying tree stumps. Sav. woods; sandy soil. Rain. No clearings.

KOLWEZI = (780 in) + (786 out)

STOP 357: 19 MI. W. KOLWEZI; 1370m; JAN 29/58. (total = 75)
(805) Camped here. Disturbed sav. woods. Mining area. Sandy bare soil.

B. CONGO

STOP 358: 43 MI. N.W. KOLWEZI: 1100m; JAN 30/58. (total = 300)
(829)

In the Kolwezi direction from here, there are a few large meadows. This is at the edge of the endemic, dense, tall sav. forest. Sandy soil.

MUTSHATSHA = (880)

STOP 359: 14 MI. N.W. MUTSHATSHA: 1200m; JAN 30/58. (total = 150)
(894)

Camped here. About 2 miles E. of the Mukulashini River Xing. High grass savannah. Sandy soil. Similar to E'ville.

KASAJI = (960)

STOP 360: 12 MI. N. KASAJI: 1100m; JAN 31/58. (total = 175)
(972) Sav. woods House-sized termite hills. Sandy soil.

STOP 361: NASONI, 28 MI. N. KASAJI: 1070m; JAN 31/58. (total = 200)
(988) Same as STOP 360, but a little less disturbed. A few miles from the junction that divides to Sandra or Tshipa.

STOP 362: 34 MI. S.E. SANDOA: 1000m; JAN 31/58. (total = 35)
(009) Camped here. High grass savannah. Rain. Sandy soil. No humus on this type of soil.

TSHIMBALANGA = (029) and is 23 Km (14 mi) E. SANDOA

STOP 363: 19 MI. E. SANDOA: 950m; FEB 1/58. (total = 225)
(034) Branch creek (swamp really) of the Kaskilashini River. All in grove of trees at edge of swamp.

STOP 364: 38 MI. E. SANDOA: 960m; FEB 1/58. (total = 100)
(053) Dense savannah woods. All "1 Bull's eye" mantled. Trees are tall; dense brush. Sandy soil.

KAFAKUMBA = (082) (on Luo River)

STOP 365: 24 MI. E. KAFAKUMBA: 1050m; FEB 1/58.
(106) Camped here. High grass sav. wood (total = 30) Bamboos line the road. Between the Luo + Lubilash Rivers. Sandy soil, no humus.

STOP 366: 54 MI. W. KINDA: 1050m; FEB 2/58. (total = 75)
(129) Burnt-over area. Brush is thick. Tall trees + high grass. red sand soil. lge termite hills.

STOP 367: 32 MI. W. KINDA: 1000m; FEB 2/58. (total = 125)
(151) Keps on dog dung. low dense trees. white sandy soil.

B. CONGO

STOP 368: 12 MI. W. KINDA: 980m; FEB. 2/58. (total = 50)
(171) Dung piles in road. 20 foot trees. High grass
grey sand soil.

KINDA = (183) Kinda is 49 MI. S. Kamina.

STOP 369: LUABO, 30 MI. S. KAMINA: 1080m; FEB 2/58.
(202) Reddish sand soil. High trees (total = 65)
and grass. ^{Riverine} Rain forest down the road a bit.

KAMINA = (232)

STOP 370: KAMINA BASE, 33 MI. E. KAMINA: 1120m; FEB 2/58.
(255) Camped here. Burnt over. (total = 50)
low, sparse, scrubby bush. Reddish sand.

STOP 371: 18 MI. N.W. KABONDO DIANDA: 900m; FEB. 3/58. (total = 100)
(281) Reddish sand. Tall trees mostly. High grass.
Few dense thickets. This is in the Hukausson
Mts.

KABONDO DIANDA = (299) Near Kamutunda.

STOP 372: 21 MI. N. BUKAMA: 750m; FEB 3/58. (total = 250)
(311) Hilly woodlands. Rocky soil. This is on the
bluff overlooking the Luabala R. to the South.
Few tall trees.

BUKAMA = (332): Bukama is 6 Km from the
main road. Reading was taken
from the junction.

STOP 373: 8 MI. S. BUKAMA: 750m; FEB 3/58. (total = 50)
(340) Camped here. Open grassy spots. Usual
woodlands, but thickets & taller trees are common.

STOP 374: 22 MI. N. LUBUDI: 1050m; FEB 4/58. (total = 75)
(373) Hilly, rocky country. boulder outcrops. Sandstone
Rocks mostly. Layer sandstone. Dense gallery
forests in spots, otherwise all woodlands.

STOP 375 LUBUDI = (395 in) + (396 out)

STOP 375: 3 MI. E. LUBUDI: 1370m; FEB 4/58. (total = 50)
(399) shale-like reddish sandstone. Woodlands.
High grass. House-sized termite hills.

B. CONGO

STOP 376: 25 MI. N. N'GUBA: ¹¹²⁰~~1100~~ m; FEB 4/58. (total = ²⁰~~100~~)
(458) H₂O beetles taken from a clear stream. Somewhat
dense savannah. sandstone base soil; low hills.

STOP 377: 14 MI. ^{N.}~~N'GUBA~~ N'GUBA: ¹¹¹⁰~~1100~~ m; Feb 4/58. (total = 100)
(469) Sav. woods. tall trees brown sand base.
Camped here. Monkeys in trees & dendrohyrax on
ground. Natives catch hyraxes in deadfalls.

N'GUBA = (483) Chameleon at (479) + 1100 m
lost same at Sumbawanga
N'Guba is near Tenke.

STOP 378: KAKONTWE CAVES, JADOTVILLE: 1250 m; FEB 6/58.
Salomon's Cave. Water temp was (total = 200)
23°C. Good coll. Cymicids & bats.

STOP 379: 18 MI. ^{N.}~~N~~ W. TSHINSENDRA: 1330 m; FEB 8/58. (total = 125)
(664) Woodlands. gold-coloured sand base soil.
Beginnings of the rise for the Zambezi-Congo divide.

STOP 380: 4 MI. N.W. TSHINSENDRA: 1400 m; FEB 8/58. (total = 100)
(678)

TSHINSENDRA = (682)

NORTHERN RHODESIA

STOP 381: 10 MI. N. CHINGOLA: 1330 m; FEB 8/58. (total = 150)
(690) Camped here. Flat, cleared regions. Few tall
trees (50-60') brown sand base.

CHINGOLA = (710) (KITWE = 739)

STOP 382: 8 MI. S.W. NDOLA: 1310 m; FEB 9/58. (total = 150)
(766) Woodlands. Tall trees. high grass. For the first
time in woodlands, leaf mould under the trees.

NDOLA = (774 in) + (775 ant)

STOP 383: ³³~~33~~ MI. S.E. NDOLA: 1320 m; FEB 9/58. (total = 3)
(808) Woodlands. Recent rains. reddish sand soil.
large trees + high grass.

STOP 384: 5 MI. N. KAPIRI MPOSHI: 1320 m; FEB 9/58. (total = 100)
(847) Woodlands. large granite "Kopje" Bigone - 250-300 ft
high. all boulders.

KAPIRI MPOSHI = (852)

STOP 385: 3 MI. S. KAPIRI MPOSHI: 1300 m; FEB 9/58. (total = 75)
(855) Camped here. gravel base soil. Woodlands
Few grassy meadows. Rain most of night.

N. RHODESIA

KAPIRIMPOSHI = (857)

STOP 386: 8 mi. N.E. KAPIRIMPOSHI: 1280m; FEB 10/58. (total = 200)
(865) Coll. under bark. Woodlands. tall trees & sparse.
Badly burned over recently. gravel soil.

STOP 387: 42 mi. S.W. KANONA: 1490m; FEB 10/58. (total = 35)
(969) Gravel soil. hilly. low woodlands & tall grass.
One bat. Rained out.

KANONA = (011)

STOP 388: KANONA: 1580m; FEB 10/58. (total = 15)
Overnite here in hotel. Hilly woodlands.
Manganese mining area.

STOP 389: 32 mi. N.E. KANONA: 1510m; FEB 11/58. (total = 225)
(643) Rocky outcrops. Bark collecting on logs.
Reddish sandy soil. Woodlands & brush.
Few Brachystegia.

MPIKA = (114)

CHAMBEZI PONTON = (191)

N. RHOD

STOP 390: CHAMBEZI PONTON: 52 mi. S. KASAMA:
(193) 1220m; FEB 11/58. (total = 250)

Chambezi River Xing.
Camped here. Woodlands. low, sparse
grass. Mostly open woodlands; few tall trees.

STOP 391: 36 mi. S. KASAMA: 1220m; FEB 12/58 (total = 14)
(207) Same type area as STOP 390.

KASAMA = (243)

STOP 392: 18 mi. N. KASAMA: 1400m; FEB 12/58. (total = 175)
(254) Woodlands; flat ground & reddish sand.
few tall trees. Burnt over recently. Bracken
in spots.

STOP 393: SENGHILL, 40 mi. S. ABERCORN: 1580m; FEB 12/58.
(301) Camped here. Woodlands. (total = 300)
Sandy soil. Top of large valley.

ABERCORN = (341 in) + (343 out)

STOP 394: TANG-N. RHOD BORDER, 22 mi. N.E. ABERCORN.
(365) 1830m; FEB 13/58. (total = 15)

Woodlands, low & open. Hilly and rocky.
No rivers.

TANGANYIKA

NOTICE

Special notice for the layered and bottled material from STOPS (394-400). Error made were ~~as stops~~ that these stops were called STOPS (494-500)

N. B.

Please note for correction:

STOP 395: 55 mi. S.E. SUMBAWANGA: 1820m; FEB 13/58.

(365) 1 viad. On the "Erwin Farm". (total = 25)
old Abercorn - Sumbawanga road. low rolling hills; low ^{open} bush. At the edge of the Hyangalid District.

STOP 396: 39 mi. S.E. SUMBAWANGA: 1530m; FEB 13/58.

(395) 1 viad. large valley. grassy (total = 50)
flats. few large trees. Burnt-over agricultural area - natives only.

STOP 397: 32 mi. S.E. SUMBAWANGA: 1590m; FEB 13/58.

(402) 1 viad. Camped here. (total = 175)

Open savannah, low trees. brown sandy soil. base of hills on way to S'wanga

TANGANYIKA

N. RHOD

STOP 398: 25 mi. S.E. SUMBAWANGA: 1980m; FEB 14/58.

(409) 1 viad. open savannah. grasslands (total = 40)
on rolling hills. brown sandy soil.

STOP 399: 16 mi. S.E. SUMBAWANGA: 2040m; FEB 14/58.

(418) 1 viad. open savannah. (total = 125)
hilltop. grazing land. rolling hills.

SUMBAWANGA = (434 in) + (435 out)

STOP 400: MBISI FOR., 11 mi. N.E. SUMBAWANGA: 2180m; FEB 14/58.

(446) Mountain forest. with (total = 240)
large euphorbias. Camped here. Temp = 55°F.
penetrating wind. Dense bushy growth.

(Sumbawanga = 457)

STOP 401: 14 mi. S. SUMBAWANGA: 1750m; FEB 16/58. (total = 200)

(471) Small patch low woodlands. large valley
now mostly agricultural. brown sandy soil.

STOP 402: 39 mi. S. SUMBAWANGA: 1700m; FEB 16/58. (total = 12)

(496) legs on wine spot. Heavy agriculture only
remnant woodlands left.

STOP 403: TATANDA, 43 mi. S. SUMBAWANGA: 1750m; FEB 16/58.

(500) Tatanda, Livingstone Memorial (total = 100)
Mission. Rock & boulder-strewn hills. Woodlands
brown sandy soil.

N. RHODESIA

STOP 404: ABERCORN: 1600m; FEB 16/58. (total = 400)

(528)

Camped here. Camp ground near a small lake. OK for swimming. Sweeping & light coll.

STOP 405: KALAMBO FALLS, 22 mi. N.W. ABERCORN; 1200m; FEB 18/58.

Sav. woods. hilly & rocky. Dragonflies (total = 125) & trees in treetops

ABERCORN = (581) TUNDUMA = (694)

STOP 406: 15 mi. S.E. TUNDUMA: 1450m; FEB 19/58. (total = 125)

(709)

Tunduma is on the Gt. N. Road. near the Tanganyika border. Now on main road to Blantyre Woodlands; hilly; brown sand soil.

STOP 407: 35 mi. S.E. TUNDUMA: 1400m; FEB 19/58. (total = 150)

(729)

Camped here. Flat ground with "pans"
Woodlands. Heavy agriculture. 1 cobra

NYASALAND

FORT HILL = (748)

STOP 408: 13 mi. S.E. FT. HILL: 1310m; FEB 20/58. (total = 100)

(761)

Valley. One of best coll. areas we've yet hit in Africa. That is, insect/min wise.
Woodlands. Approx 1/4 mile from Chichipanga R.

CHISENGA = (772) (Not on map.) rails & transoms

STOP 409: 31 mi. S.E. FT. HILL: 1600m; FEB 20/58. (total = 100)

(779)

9 miles S. Chisenga. 1-2 miles before dropping into a valley. Hilly; low, dense woodlands. reddish sand.

N. RHODESIA

STOP 410: 17 mi. N. MUYOMBE; 1500 m; FEB 20/58.

(804)

at the edge of a long slow drop (total = 125)
to Mnyambe. Woodlands. Hilly; brown sand soil.

MUYOMBE = 821

NYASALAND

~~STOP 4~~

KATUMBI = (847)

STOP 411: 4 mi. E. KATUMBI: 1460 m; FEB 20/58. (total = 100)

(851)

Camped here. Mostly light coll. At the Katumbi
NYIKA - NJAKWA jct. Heavy rain.
Woodlands.

STOP 412: 13 mi. W. NJAKWA: 1100 m; FEB 21/58. (total = 50)

(868)

Rukuru R. valley. Dense thickets + bush.
Rain. Sandy + muddy. Valley flats.

NJAKWA = (881)

STOP 413: 6 mi. S. NJAKWA: 1100 m; FEB 21/58. (total = 140)

(887)

Woodlands. low bush + euphorbias.
brown sand base.

STOP 414: 6 mi. N. EKWENDENI: 1200 m; FEB 21/58. (total = 150)

(900)

Atop a ridge after crossing the Kasitu R.
edge of a plateau. rocks + woodlands.

EKWENDENI = (906)

NY ASA

STOP 415: 11 MI. N.W. NKATHA BAY: 590m; FEB 21/58.
(943) Camped here. On the long, (total = 40)
slow decline. Burnt-over regrowth.
Some woodlands. Heavy agriculture. Rain.

NKATHA BAY = (954)

STOP 416: MKUWAZI HILL FOR., 11 M.S. NKATHA BAY: 590m;
FEB 22/58 (total = 350)
Dense lowland forest. No sun & heavy
clouds. Cell poor for amt time spent.

EKWENDENI = (018)

STOP 417: 12 M.S.W. EKWENDENI: 1230m; FEB 22/58.
(030) Camped here. Bushy sav. or (total = 75)
Savannah scrub. about from the Kasitso R.
Xing on the way to Mzimba.

STOP 418: 4 MI. N. MZIMBA: 1360m; FEB 23/58. (total = 200)
(047) Thornless acacia. Scrubby woodlands. Gravel
in spots; brown, sandy soil.

STOP 419: 10 MI. N. MZIMBA: 1610m; FEB 23/58. (total = 200)
(078) Scrubby woodlands. Few tall trees. Few house-sized
termite hills, gravel patches; reddish sand base.

NY ASA

MZIMBA = (088.)

STOP 420: 19 MI. N. KASUNGU: 1100m; FEB 23/58. (total = 90)
(161) Camped here. Woodlands with high grass.
Tall trees, well-spaced. Heavy agriculture.

KASUNGU = (180) LILONGWE = (256)

STOP 421: 16 MI. W. DEDZA: 1380m; FEB 24/58. (total = 200)
(300) High grass woodlands. Well-spaced trees.
Occasional boulder outcrops. Large valley.

DEDZA = (316)

STOP 422: 21 MI. S.E. DEDZA: 1450m; FEB 24/58. (total = 125)
(337) Camped here. Heavy agriculture. Much low
scrub; probably all 2nd growth. This is
NOT the "Lake View Road."

NCHEU = (357)

STOP 423: 9 MI. S.E. NCHEU: 880m; FEB 25/58. (total = 30)
(366) large creek. tall trees. Sandy, dirty soil.

NYASA

STOP 424: 53 MI. N. BLANTYRE; 630m; FEB 25/58

- (392) Woodlands. gravel soil. Tall (total = 100) trees; baobab trees begin just a few miles S. of here. Matope is 20 miles S. of here, on the Shire River

BLANTYRE = (445) in (446) out.
CHOLO = (470)

STOP 425: 7 MI. S. CHOLO: 940m; FEB 25/58. (total = 100)

- (477) Near the Malawi Mission. Camped here. Tea estates on all sides here. Shire R. can be seen below to the right. Natural trees left in steep canyons only.

STOP 426: 11 MI. N. CHIROMO: 250m; FEB 26/58. (total = 25)

- (509) Woodlands. Hilly. gravelly soil; tall trees, well-spaced. Heavy agriculture.

STOP 427: CHIROMO: 100m; FEB 26/58. (total = 150)

- (520) Camped here. At the Agric. Research Stat. in Chiromo. Good sweep net coll. Woodlands. Dense bush in spots. Damn hot.

NYASA

BLANTYRE = (596)

STOP 428: SHIRE RIV, BLANTYRE-NCHEURD: 550m; FEB 27/58

- (626) The Shire (from Sheeray) R. (total = 50) is approx 1/2 mile away. Open woodlands. ~~one~~ lone hill in sight. Near Matope airport. ~~The~~ Camped here. No baobab trees here.

STOP 429: 39 MI. N. BLANTYRE: 580m; FEB 28/58. (total = 100)

- (635) Woodlands. Occasional baobab tree. High grass + dense, patchy bush.

LILONGWE = (781)

STOP 430: 31 MI. W. LILONGWE; 1150m; FEB 28/58. (total = 25)

- (812) Camped here. Heavy rains. poor coll. all round. Patch of 2nd growth woodlands. Heavy agriculture. Hard burning at some recent time here.

STOP 431: 8 MI. E. FT. MANNING: 1120m; MAR 1/58. (total = 50)

- (839) Same type region as previous stops, except fewer farms. Hilly. Brown sandy soil. Woodlands.

FT. MANNING = (847)

N. RHODESIA

FORT JAMESON = (867)

STOP 432: 39 MI. S.W. FT. JAMESON: 1150m; MAR 1/58. (total = 125)
(906) Woodlands. Tall trees + grass. Low, rolling hills.
brown, sandy soil.

KATETE = (917)

1 cricket at (950) + (1150m)

MINGB = (982)

NYIMBA = (012)

STOP 433: 44 MI. S.W. NYIMBA: 570m; MAR 1/58. (total = 25)
(056) Camped here. River canyon. Sandy soil.
Woodlands. Fresh green grass. Heavy rains.

LUANGWA (Luangwa R. Xing) = (075)

STOP 434: 12 MI. E. RUFUNSA: 1060m; MAR 2/58. (total = 200)
(108) Hilly region. S. of Masamwa Hills. Sandy.
Some flagstone outcrops. White sand. just a few
miles before a drop down an escarpment to 800m.

RUFUNSA (FLY BARRIER) = (120)

N. RHOD

STOP 435: 31 MI. E. LUSAKA: 1150m; MAR 2/58. (total = 130)

(185)

Camped here. Woodlands with tall trees +
grass. Meadow swamps in grassland depressions.
In these, there are no trees. brown sand soil.

LUSAKA = (216 in) + (230 ant) one night here.

STOP 436: 6 MI. N. KAFUE: 1050m; MAR 4/58. (total = 250)

(253)

a few rocky hills - mostly boulders. Meadows
between hills. Woodland trees on hills.

Emlidoptera here.

KAFUE = (259) 1 scorpion at (296) + (1100m)

MAZABUKA = (306)

STOP 437: 14 MI. S.W. MAZABUKA: 1050m; MAR 4/58. (total = 6)

(320)

On bark of large tree. 1 ascalaphid + five allenebids.
Agricultural area. Open Woodlands + grasslands.

MONZE = (341)

PEMBA = (362)

STOP 438: PEMBA: 1250m; MAR 4/58. (total = 150)

(360)

Camped here. Dense Woodlands several large
termite hills. low grass. brown sandy soil.

N. RHOD

STOP 439: 15 MI. S. DEMBA: 1270m; MAR 5/58. (total = 300)

(377)

Euphorbias + large termite hills.

Woodlands with thick patches of bush.

BATUKA = (382)

CHOMA = (399)

ZIMBA = (465)

STOP 440: 24 MI. N. LIVINGSTONE: 1180m; MAR 5/58. (total = 200)

(486)

Woodlands. few large trees over 100' high. near a tobacco plantation owned by Mr. Grobler. High grass.

Freshly cut trees. Camped here.

LIVINGSTONE = (510)

STOP 441: LIVINGSTONE: 900m; MAR 6/58. (total = 75)

Coll in areas between the FALLS + Livingstone.

Camped in public grounds near the falls. River in highest recorded flood.

MAZABUKA = (727)

STOP 442: 33 MI. S.E. MAZABUKA: 1180m; MAR 7/58. (total = 75)

(760)

Camped here. long, rocky hills about 10 miles from the Kafue R. Xing. Kafue-Mazabuka Rd. Woodlands.

N. RHOD

STOP 443: KAFUE; 960m; MAR 8/58. (total = 100)

(777)

Coll. in the Kafue town and on the slopes to the N. of town. Very open savannah. high grass: few rocky outcrops.

CHIRUNDU = (831)

Otto Beit Bridge.

SOUTHERN RHODESIA

CHIRUNDU = (831)

STOP 444: 17 MI. S. E. CHIRUNDU: 520m; MAR 8/58. (total = 150)

(848) Beit Bridge on the Zambezi R. Sandy soil
Baobab trees; high grass + bush thickets
just a few miles from the Zambezi Escarpment.

STOP 445: 25 MI. S. E. CHIRUNDU: 880m; MAR. 8/58.

(858) Top of Zambezi Escarpment. (total = 100)
Hilly, rocky; woodlands. New road being put
in, so I have figured for the same.

STOP 446: 33 MI. S. E. CHIRUNDU: 1170m; MAR 8/58.

(865) Camped here. Hilly. gravel (total = 150)
soil. Woodlands. high grass + low trees. few
rocky outcrops.

KAROI = (917) (not on map)

STOP 447: KAROI: 1220m; MAR. 9/58. (total = 50)

(918) small, man-made lake near Karoi.
Woodlands. high grass gravel soil.

STOP 448: 26 MI. N. W. SINOA: 1150m; MAR 9/58. (total = 250)

(943) rocky hills; strewn with boulders Hilly woodlands

STOP 449: SINOA CAVES: 1200m; MAR 9/58. (total = 50)

(964) Some collecting in limestone caves. a little
outside. Caves damp + muddy at this time of
year.

SINOIA = (969)

BANKET = (998) DARWENDALE (007)

STOP 450: 3 MI. E. DARWENDALE: 1370m; MAR 9/58. (total = 40)

(010) Camped here. Geological area known as
"The Bank. Woodlands, meadows + low hills.

SALISBURY = (045) in + (096 out)

STOP 451: SALISBURY: 1475m; MAR 10/58.

total = ? (maybe 150)

Coll. at the Camp grounds and at Coronation Park.

Some of the Agric Service Dept. in the town. 2 miles here

STOP 452: 6 MI. W. MARANDELLAS: 1600m; MAR. 12/58 (total = 200)

(131) Kopje at the roadside. Large boulders. Small patch of
trees. Some bushman paintings on a rock. few farms.

STOP 453 MARANDELLAS = (137)

S. RHOD

STOP 453: 11 MI. E. MARANDELLAS: 1570m; MAR 12/58.

(48) Kopje. Found an ancient stone (total=100)
fortress here. Woodlands. Dry. Granite Boulders.

RUSAPE = (194)

INYAZURH = (206)

STOP 454: 1.5 MI. S. RUSAPE: 1200m; MAR 12/58. (total=40)

(209) Camped here. High grass. Woodlands &
kopjes. gravelly soil.

STOP 455: UMTALI HEIGHTS: 1420m; MAR 13/58. (total=175)

Umtali Hts is on the road to Salisbury and
is about 3 or four miles from Umtali.

Rocks & boulders. Open woodlands.

UMTALI = (249 in) + (25 out)

MOZAMBIQUE

VILA MANICA: (269)

STOP 456: 2.7 MI. E. VILA MANICA: 700m; MAR 13/58. (total=250)

(286) Camped here; lowland woodlands. High grass.
This is just beyond the Ruve River Xing.

STOP 457: VANDUZI, 21 MI. W. VILA PERE: 700m; MAR 14/58.

(296) Patch of dense forest. No undergrass (total=100)
Large trees. Creek at base of hill. Few citrus
trees. Some dirt sifting - poor results.

VILA PERE = (317) GONDOLA = (331)

STOP 458: 11 MI. E. GONDOLA: 480m; MAR 14/58. (total=4)

(342) Dense, lowland forest. Tall trees. Thick vines
no undergrass. Deep leaf mould.

STOP 459: 6 MI. E. VILA MACHADO: 80m; MAR 14/58. (total=32)

(380) Flat land. Covered spottily by low, scrubby
trees. few grassy, treeless meadows.

TURN AROUND = (388) = 75 km from Beira.

VILA MACHADO = (402)

MOZAMBIQUE

STOP 460: 10 MI. W. VILA MACHADO: 220m; MAR. 14/58

(412) Camped here. 2 large hills on total = (250)

the left hand side of the road as you go west.

Only 2 to be seen for miles. Possibly in the Amatongas region ?? Very dense Woodlands with some forest. Monkeys in trees.

Good coll. all round.

S. RHODESIA

STOP 461: UMTALI HEIGHTS: 1300m; MAR 15/58. (total = 250)

Same area as (STOP 455)

Camped here for 2 nights at the Camp grounds.

STOP 462: FOR. RESERVE; VUMBA; 1650m; MAR 16/58 (total = 50)

Endemic mountain forest. Wet + cold + misty.

UMTALI = (574)

STOP 463: 41 MI. S. UMTALI: 640m; MAR 17/58: (total = 100)

(615)

Camped here. good light collecting, but poor daylight collecting. About 9-10 miles north of Hot Springs. To the west is the Sabie R. Thorny acacia + many seed stickers

HOT SPRINGS = (624)

STOP 464: 4 MI. S. HOT SPRINGS: ^(OR) 54 MI. S. UMTALI: 560m; MAR 18/58.

(628)

Bush + Woodlands. Many cow trails. Sandy soil with scattered surface boulders (total = 150)

CHIPINGA = (679)

S. RHOD

STOP 465: CHIRINDA FOR., 18 MI. S. CHIPINGA: 1110m; MAR 18/58.

(697) Camped here. Mountain forest. (total = 250)

Good leaf mould. On map, this is called "Mt Selinda". This is not correct, as it is a corruption of "Chirinda."

STOP 466: 12 MI. S. CHIPINGA: 970m; MAR 19/58. (total = 200)

(710) Woodlands. low grass & well-spaced trees. brown sandy soil. Similar to the Katanga.

CHIPINGA = (722)

STOP 467: 18 MI. N. W. CHIPINGA: 800m; MAR 19/58. (total = 50)

(740) About 1/2 mile from the "Three Berg Pass" Chipinga-Birchenough Bridge Road. Hilly woodlands & rocky outcrops.

BIRCHENOUGH BRIDGE = (760)

BIKITA MINES.
GLEN CLOVA = (822)

STOP 468: BIKITA MINES: 1200m; MAR 19/58. (total = 75)

(822) Camped here. Glen Clova or Bikita mines. Woodlands & kopjes. Birchigh Bridge - Ft. Victoria Rd.

STOP 469: 17 MI. N. E. ZIMBABWE; 1050m; MAR 20/58. (total = 200)

(848) Woodlands; kopjes & rocky hills. shale-like sandstone material. Raining weather water wash.

S. RHOD

ZIMBABWE = (865)

STOP 470: ZIMBABWE; 1100m; MAR 20/58. (total = 75)

Camped here on the provided camp grounds. Woodlands & granite kopjes. Open & flat ground with large, well-spaced kopjes.

FT. VICTORIA = 883

STOP 471: 14 MI. W. FT. VICTORIA: 1050m; MAR 21/58. (total = 150)

(897) Rocky hills (kopjes) a cattle dip is the big issue here, and is the only one around for miles. Well-grazed grass. Open woodlands.

MASHABA = (907)

SHABANI = (941)

STOP 472: 10 MI. S. W. SHABANI: 1050m; MAR 21/58. total = (150)

(957) Dry, hilly, woodlands. small boulders on the surface. sand base soil. A few miles from here the country opens up to a broad flat expanse of valley.

STOP 473: 10 MI. N. E. FILABUSI: 1100m; MAR 21/58. (total = 75)

(986) Camped here. woodlands. granite outcrops on the hills. Open & flat in spots. just past the first hills after crossing a large valley or flat.

S. RHOD

FILABUSI = (996) BALLA BALLA = (013)

STOP 474: 2 MI. N.W. BALLA BALLA: 1100m; MAR 22/8. (total = 100)
(015) large granite dome hills. loose exfoliation on surface. open woodlands.

BULAWAYO = (054)

STOP 475: KHAMBI RUINS, 14 MI. W. BULAWAYO: 1275m; MAR 22/8.
In the area of the Khambi dam and (total = 125)
the Khambi Ruins. Koppies are numerous and small. Camped here. Few large trees.
Brown sand soil. Woodlands.

BULAWAYO = (085) approx.

STOP 476: MATOPOS MISSION, ^{OLD} GWANDA-RD ~~BULAWAYO RD~~: 1400m;
(119) large granite boulders; Koppies. 11 MAR 23/8. (total = 65)
In flat areas are woodlands + farms. The mission is about 2 miles N. towards Bulawayo.

GULUBAHWE Cliff Paintings (125) at 1250m;

S. RHOD

STOP 477: 14 MI. N.W. GWANDA, OLD GWANDA RD: 1050m;
(141) MAR 23/8. (total = 100)

Camped here. Nature reserve area.
Woodlands + large granite Koppies.

GWANDA = (155)

STOP 478: 16 MI. S.E. GWANDA: 900m; MAR 24/8. (total = 25)
(171) rocky hills + high grass. dense patch bush.

STOP 479: MAZUNGA: 600m; 24/III/8. (total = 35)
(235) low, dry grass in open Woodlands. patches of dense bush, all low. few rocks here.

STOP 480: 14 MI. N.W. BEIT BRIDGE: 540m; MAR 24/8.
(254) thick, low bush. few Koppies. (total = 125)

BEIT BRIDGE = (268)

UNION OF SOUTH AFRICA

TRANSVAAL

STOP 481: 2 MI. N. MESSINA: 590m; 24/III/58 (total = 200)

(275) Camped here. One large, almost dome-like granite kopje. Only one of any size for miles. Dry grass & low open bush.

MESSINA = (277)

STOP 482: 21 MI. S. MESSINA: 660m; MAR 25/58. (total = 400)

(298) meadows, woodlands & bush. Few good spots where road crews have made water traps. flat ground & red sand.

STOP 483: 11 MI. N. L. TRICHARDT: 800m; 25 MAR/58. (total = 200)

(315) North base of the Joutepanberg. Also beginning of Wyllie's Poort. Rocky canyon. bush. green grass.

LOUIS TRICHARDT. = (326) approx.

STOP 484: 18 MI. S. LOUIS TRICHARDT: 1000m; MAR 25/58. (total = 125)

(344) Camped here. mostly pasturage, but a few kopjes here. euphorbias bush. Rain.

TRANSVAAL

485
STOP 485: DWARSRIVIER, 35 MI. S. LOUIS TRICHARDT: 1000m; MAR 26/58. (total = 500)

(361) Euphorbias and granite kopjes. low bush around. good stone & manure collecting.

PIETERSBURG = ~~1200m~~ (396)

486
STOP 486: 10 MI. E. PIETERSBURG: 1200m; MAR 26/58. (total = 75)

(406) Cacti. Soapstone kopje. Only one around. Euphorbias in valley below. None here.

BOYNE = 418.

STOP 487: 2 MI. N. E. BOYNE: 1150m; MAR 26/58. (total = 75)

(420) Camped here. Steep rocky hills covered with euphorbias low bush, aloe and thorny acacia. Tzaneen - Pietersburg Rd. ~~Rocky~~

STOP 488: 15 MI. W. TZANEEN: 1250m; MAR 27/58. (total = 65)

(437) Small patches of endemic forest. This is on the way down from the "Kloof." Rain. Muddy soil. Steep escarpment.

TZANEEN = (452)

TRANSVAAL

LEYDSDORP = (481)

STOP 489: LEYDSDORP; 580m; MAR 27/58. (total = 40)
(481) Kopje composed of round, white, high-grade granite boulders. low bush + high grass.

GRAVELLOTTE = (481)

STOP 490: 17 MI. S.E. GRAVELLOTTE: 425m; MAR 27/58. (total = 50)
(504) 6 miles N. of the ~~Olifants~~ Olifants R. King.
Granite kopjes. Dense bush. gravel soil.

OLIFANTS ^{RIVER} ~~RIVER~~ KING = (510)

STOP 491: 25 MI. S.E. ~~GRAVELLO~~ GRAVELLOTTE: 360m; MAR 27/58.
(512) Camped here. low bush and (total = 50)
high grass. - dry. on the S. side of the Olifants R.

ACORN HOOK = (560)

STOP 492: KLASERIE: 600m; MAR 28/58. (total = 75)
2 nights here. Klaserie is about 5 miles N.
of Acornhook. Fleur de lys farm owned by
Mr. Mathews. low dense scrub

STOP 493: DRAKENSBURG MTS, 12 MI. W. KLASERIE;
1275m; MAR 29/58. (total = 200)

Small patches of endemic forest amongst
thick groves of pine trees. Forest is similar
to the forest near Tzaneen.

STOP 494: DRAKENSBURG MTS, 8 MI. W. KLASERIE; 1000m;
Shoulder of a pass. MAR 29/58. (total = 100)
Endemic forest, similar to previous stop.

STOP 495: GRASKOP: 1375m; MAR 30/58. (total = 30)
(652) Just at the edge of the Drakensberg Escarpment.
Few rocks, in dup, on surface. Grassy slopes

GRASKOP = (653) SABIE = (670)

STOP 496: 10 MI. E. LYDENBURG: 2000m; MAR 30/58. (total = 60)
(692) Top of "Long Tom Pass." Grassy slopes.
Misty. Rocks on surface.

LYDENBURG = (702)

STOP 497: 20 MI. N.E. DULLSTROOM; 1500m; MAR 30/58. (total = 2)
(719) flat stones on grassy hill. No endemic
remnants of trees. Dullstroom-Lydenburg
Rd.

TRANSVAAL

DULLSTROOM; = (739)

STOP 498: 13 MI. N. E. DULLSTROOM; 1800m; MAR 30/58.

(726) Small creek in rolling, grassy hills // (total = 50)
Rocks on surface in spots. pine forests.

DELFEST = (756) MIDDLEBURG = (793)

STOP 499: MIDDLEBURG: 1400m; MAR 30/58. (total = 50)

large eucalyptus grove at the west end of town. Camped here. flat, sandy soil.

WITBANK = (812)

STOP 500: 12 MI. W. WITBANK: 1350m; MAR 31/58. (total = 25)

(824) Rolling, grassy hills. few rocks on surface.
scattered eucalyptus + pine trees -

PRETORIA = (873 in) + (900 out)

STOP 501: PRETORIA: 1320m; ^{april} ~~MAR~~ 1st/58. (total = 35)

Few moths at night lights. Camped & here for 3 nights at the Campgrounds. some stone turning

Green job + bearing repacking at Delmas
(19,941)

TRANSVAAL

PIET RETIEF = (098)

STOP 502: 15 MI. W. PONGOLA: 550m; MAR 3/58 (total = 500)

(141) Camped here. River ^{valley} canyon. Remnants of low scrub. + bush. few euphorbias.

PONGOLA = (156)

UNION OF SOUTH AFRICA

NATAL

CHANDOVER = (185) (UBOMB0 = 201)

STOP 503: 3 mi. N. UBOMB0: 4/14/58. 460m; (total = 25)
(204) at the edge of the high hills ~~at~~ which Ubombo is situated. few rocks on surface cleared bush.

STOP 504: 10 mi. N. UBOMB0: 160m; 4/14/58. (total = 700)
(211) Camped here. Coastal plain; low, flat hills. Open and dense bush. numerous rocks on surface. This is not far from the Pangola R. Xing near Otobotini.

-10 miles for trip up to Pangola River on road reading to Sordwana bay.

STOP 505: 50 mi. E. UBOMB0 at SORDWANA BAY; SEA LEVEL.
(261) APRIL 5/58. (total = 125)
Camped here. Hydrophilid coll in stream. Tenebrs + weevils abundant in the sand. Plenty of low, dense bush. good bee coll. on flowers.

STOP 506: 33 mi. E. UBOMB0: 80m; APRIL 6/58. (total = 50)
(288) Dense thickets. All the same life zone from the ocean to the hills at Ubombo. Acacia plentiful.

NATAL

STOP 507: 3 mi. N. UBOMB0: 300m; APRIL 6/58. (total = 75)
(305) Camped here. Same as stop 503, but just a bit lower down. about one third of the way up the hills.

UBOMB0 = (308)

STOP 508: 1 mi. E. MKUSI: 160m; APRIL 7/58. (total = 100)
(312) This is on the present Ubombo-Mkusi rd., but as this road is no good for directions, this is computed distance; the collecting spot can easily be seen at the base of the hills, from Mkusi. Boulders on surface. dry, low scrub.

MTUBATUBA = (381) ST. LUCIA = (397)

STOP 509: ST. LUCIA; 50m; APRIL 7/58. (total = 250)
(397) Coll. mainly in the area on the east side of the bridge and only a few yards from it. Dense coastal forest. sandy ground. Good sweeping.

STOP 510: 7 mi. E. MTUBATUBA: 75m; APRIL 7/58. (total = 250)
(409) Camped here. End of the eucalyptus groves and the beginning of the endemic forest + bush sandy soil.

MTUBATUBA = (416) EMPANGENI = (948)

NATRAL

STOP 511: 16 mi. N. E. ESHOWE; 290m; 8/14/58. (total = 30)
 (466) This is at the "Tshaka Test of Courage" monument
 on the Cupangeni-Eshowe Rd. Hilly grasslands.
 Few boulders on surface.

ESHOWE = (482)

STOP 512: ESHOWE; 480m; 8/14/58. (total = 80)
 (482) On the S. road out of town. gullies with
 original trees. Grasslands above on hill tops.
 Swampy or spongy ground.

UMHLALI = (539)

STOP 513: SALT ROCK BEACH, UMHLALI; SEA LEVEL; 8/14/58.
 (542) Camped here on the Hotel Camp grounds. total = 200
 Label can also be "Umhlali Beach" as there is only
 one Umhlali.

DURBAN = (575)

STOP 514: 21 mi. S. E. P'MARITZBURG: 600m; 9/14/58. (total = 100)
 (599) Steep rocky slopes. partial remains of endemic forest.
 Also "Wynles Canyon - 1955" approx 2 miles from
 Cato Ridge.

NATRAL

PIETER MARITZBURG = (620 in) + (629 out)

STOP 515: P'MARITZBURG: 675m; 9/14/58. (total = 50)
 Camped in public camp grounds.
 sweeping and light coll.

KRANSKOP = (691)

STOP 516: EMAKABELENI, 8 mi. N. KRANSKOP: 1075m; 10/14/58.
 (699) Steep, rocky hillside. Grassy hill tops (total = 100)
 Beginning of descent into the Tugela R. Canyon

STOP 517: TUGELA R. CYN, 19 mi. N. KRANSKOP: 450m; 10/14/58.
 (710) 3 miles up the road from Jameson's drift. (total = 10)

Jameson's Drift = (713) EKOMBE = (730)

STOP 518: EKOMBE FOR., 39 mi. N. KRANSKOP: 1520m; 10/14/58.
 (730) Camped here. Patches of hillside (total = 600)
 covered with endemic forest. Near the Ekombe
 mission Hospital + Police Station
 Cool nights + cloudy afternoons.

RICHMOND = (863)

NATAL

RICHMOND = (863)

STOP 519: UMKOMHAS R., 9 mi. S. RICHMOND: 375 m;
(872) 12/IV/58. (total = 125)

Boulders on valley flats. Low bush.
Rain; sandy soil.

Union of South Africa.

CAPE PROVINCE

PORT ST. JOHNS.

STOP 520: PORT. ST. JOHNS: SEA LEVEL: 13/IV/58 (total = 400)

Coll. almost entirely on the beach. 7-8 AM
collecting is best near the river mouth. Dense,
low forest in back. Collecting is best on the sand
banks on the rt. hand side of the river.
Camped here for 2 nights.

PORT ST JOHNS = (047)

UMTATHA = (103)

STOP 521: UMTATHA: 675 m; 14/IV/58. (total = 75)

(102)

few rocks on steep hillside about one mile
east of town. small creek. Rolling, grassy hills.

STOP 522: 1 mi. E. ENGCORO: 1800 m; 14/IV/58 (total = 50)

(151)

Boulders on hillside: high, rolling hills.
Patches of bush.

COFINVABA = (191)

ENG CORO = (152)

QAMATHA POORT = (200)

STOP 523: QAMATHA POORT: 900 m; 14/IV/58. (total = 7)

(200)

rocky slopes just to the W. of town. Rain.
Patches of low bush. Cacti.
9 miles west of Cofimvaba.

C.P

STOP 524: 22 MI. W. COFIMVABA: 940m; 14/IV/58. (total = 800)
(213) Farmland owned by Mr. Weir. Grasslands
+ bush. Rocky hills. Camped here.

QUEENSTOWN = (240)

STOP 525: 6 MI. N. WHITTLESEA: 1000m; 15/IV/58. (total = 150)
(255) Large valley. Near the farm of one Mr. Davis.
small, rocky shoulder of a hill. Thorny acacia.

WHITTLESEA = (261)

BALFOUR = (298)

STOP 526: 8 MI. S. BALFOUR: 500m; 15/IV/58: (total = 150)
(306) Camped here. hilly country. Cactus infestation
thorny acacia + euphorbias. Crossed the
Winterbergen Range + the Katberg. Dense low
bush. Citrus groves along the river.

FT. BEAUFORT = (316)

STOP 527: 17 MI. S. FT. BEAUFORT: 500m; 16/IV/58. (total = 100)
(333) Aloe, daisies + euphorbias (2 spp.) - bush acacia.
Thick impenetrable bush.

~~ATAT~~
CAPE PROVINCE

STOP 528: BOTHAS RIDGE, 11 MI. N.E. GRAHAMSTOWN.
(350) 250m; 16/IV/58. (total = 100)
Steep rocky slopes; acacia, euphorbias,
aloe and agave.

GRAHAMSTOWN = (361)

STOP 529: 5 MI. S.W. GRAHAMSTOWN: 300m; 17/IV/58. (total = 50)
(366) "Stone Crescent Hotel." Grahamstown P.E.L.I.Z. Rd.
rocky. low, thick, thorny acacia bushes
cactus, aloe + euphorbia.

STOP 530: SAND FLATS: 280m; 18/IV/58. (total = 75)
(421) Sand flats is off the main road between
Grahamstown and Addo. Beach type sand.
Termites + wasps. 25 miles N.E. ADDO.

STOP 531: DUNBRODY, 8 MI. S.E. KIRKWOOD: 60m; 18/IV/58.
(452) Dunbrody is a railroad stop. (total = 125)
Sundays River Valley. Sandy soil.
low bush, except where cleared for citrus groves.

(KIRKWOOD = 460)

C.P.

STOP 532: 9 mi. W. KIRKWOOD: 140m; 18/IV/58. (total=100)
(469) Camped here. Patchy bush about 3 feet high.
Sundays R. Valley. Sandy soil. One mile
from Kariëga

KARIEGA=(470): GLENCONNOR=(478)

STOP 533: PERDEPOORT, 11 MI. S.E. GREYSTONE; 500m; 19/IV/58.
(491) approx. the middle of Perdepoort. (total=(100))
steep rocky canyon. Extremely small
Hydrophilids in ~~dry~~ creek pools. Cactus
euphorbias + bush.

GREYSTONE; (502) MT. STEWART=(541)

⁵³⁴
STOP 533: 6 MI. N.E. STEYTLERVILLE: 450m; 19/IV/58. (total=125)
(553) Rounded rocky hills. Extremely dry. Desert-like.
Cactus + thorny acacia. Computed distance

WOLFFONTEIN=(582) KLEIN POORT=(587)

STOP 535: 8 MI. S.E. KLEIN POORT: 350m; 19/IV/58: (total=30)
(595) Camped here. Heavy rains at dusk.
low bush + cactus: euphorbias rolling hills.
some rocky. Bush.

C.P.

VITENHAGE=(639)

STOP 536: 6 MI. S.W. VITENHAGE; 250m; APRIL 20/58. (total=30)
(645) low, patchy bush. Burnt over. Rolling hills.

STOP 537: VANSTADEN'S PASS: 100m; 20/IV/58. (total=200)
(655) Also spelled Van Staadens Pass. Also Van
Staden's River. Endemic forest. Public
camp ground.

PORT ELIZABETH=(678) in + (703 out)

STOP 538: HUMewood, PORT. ELIZ; 25m; 20/IV/58. (total=75)
In the P.E. region and also - mainly - near
Humewood.
Camped here for 2 nights.

HUMANSDORP=(754)

STOP 539: KARRIEDOUW; 300m; 22/IV/58. (total=200)
(788) On the slopes of the Karedouw Pass.
Camped here. Heath + protea are principle
plants. Bracken is also present. rocky hills.

C. P.

STOP 540: STORMS RIVER: 200m; 23/IV/58. (total = 125)
(884) Endemic forest at the Storms river Bridge.
Cape Town - P. E. Highway. Soil sifting should
be tops if the ground were drier. 100' trees
No undergrowth.

STOP 541: PLETTENBERG BAY; 20m; 23/IV/58. (total = 200)
(846) between Keeraboom rivier & Plettenberg Bay
Sandy soil; low bush: good coll in moss
on ground at bottoms of the hills.

(KNYSNA - (872)) - 2 miles for backtrack

STOP 542: WILDERNESS, 11 MI. E. GEORGE: 50m; 23/IV/58
(898) Camped here. Sand. At the oceans (total = 10)
edge above the large sea cliffs. Near a ~~large~~
hotel to the east of town.

WILDERNESS = (899)

GEORGE = (909)

58

STOP 543: 5 MI. W. HEROLD: 600m; 24/IV/58. (total = 40)
(926) Herold is on the old main road between George
+ 2 miles. and Oudtshoorn. Boulder strewn hills.
low mesquite or creosote-like bushes

HEROLD = (933)

C. P.

HEROLD = (933)

STOP 544: 3 MI. N. HEROLD: 550m; 24/IV/58. (total = 175)
(936) Shale-like rocks strewn on surface
Gullies; rocky hills; dry, scrubby bush.

OODTSHOORN = (959)

STOP 545: 3 MI. S. E. CALITZ DORP: 275m; 24/IV/58. (total = 100)
(987) Boulder strewn hills in a large valley.
Very dry. few patches of bush & thorny acacia.

CALITZ DORP = (990)

STOP 546: 11 MI. W. CALITZ DORP: 700m; 24/IV/58 (total = 75)
(961) Summit of the Huis River Pass. man made
pool for cattle. Shale rocks on surface.
Amaleinstein = (005)

~~LADISMI~~

LADISMITH = (018)

STOP 547: 3 MI. S. W. LADISMITH: 475m; 24/IV/58. (total = 150)
(022) Camped here. Sandy to gravelly soil.
Shale rock hills. some quartz outcrops.
low bush. rich succulent growth.

C. P.

STOP 548: 7 MI. N. E. BARRY DALE: 500m; 25/IV/58
(069) a ♀ tarantula + young; 1 lyxoid. (total = 2)
shale rocks on surface; sandy soil.
low brush.

BARRY DALE = (067) + one mile to (068)

STOP 549: 4 MI. S. BARRY DALE; 375m; 25/IV/58. (total = 30)
(072) In the Tradouw Pass. at the spot where
you park to see the Bushman paintings
steep rocky pass; creek. shrubs + steep
rocky meadows.

SWELLEN DAM = (097)

STOP 550: 2 MI. S. SWELLEN DAM; 175m; 25/IV/58. (total = 80)
(099) Breede River Xing. Altered Boulders on surface.
low shrubs.

RIVER ZONDER END = (129)

STOP 551: 8 MI. E. CALEDON: 400m; 25/IV/58 (total = 30)
(151) In a gully. foothills of the River Zonder End
Bergen. farmlands. Camped here. Cold
and extremely windy.

CALEDON = (159)

STOP 552: HOWW HOEK PASS: 250m; 26/IV/58. (total = 40)
(175) Also, 3 miles W. Botville. rocky slopes.
grass and low bracken burnt over within past year

SIMONSTOWN = (240)

STOP 553: CAPE POINT; 250m; 26/IV/58. (total = 100)
(247) Rocky outcrop just before the entrance to
the Cape Game Refuge + park. Heather-type
bush. jagged rocks.

STOP 554: CAPE POINT: SEA LEVEL: 26/IV/58. (total = 400)
(252) Buffels Bay. East side of the Cape Peninsula.
Coll entirely under seaweed on beach.
The west side of the Cape is very poor collecting.

CAPE TOWN = (351 out) 3 nights here.

PICKETBERG:
STOP 555: BERG RIVIER, 4 MI. S. ~~PICKET~~ 150m; 30/IV/58
(429) at the Berg Rivier Xing, there is (total = 150)
a hill, on south side, with rocks on it. Farmland.

PICKETBERG = (433)

CAPE PROV.

STOP 556: 2 MI. S.W. CITRUS DAL: 150m; 30/11/58. (total = 250)
(461) Camped here; on the Grey's Pass. on the old
pass road. bush. rocky slopes.

CITRUS DAL = (463)

STOP 557: 12 MI. N. CITRUS DAL: 110m; 1/11/58. (total = 75)
(475) Along the old road on the N. Side of the river. Olifant
low scrub. few citrus groves. Rocky hills
sandy soil.

STOP 558: 11 MI. S. CLAN WILLIAM; 1/11/58. 110m; (total = 50)
(485) No citrus groves, otherwise same as previous
stop.

CLAN WILLIAM = (496)

STOP 559: CLAN WILLIAM; 100m; 1/11/58 (total = 100)
(498) Irrigation ditch. few rocks on ground
surface. low, thin scrub bush.

STOP 560: 8 MI. N.W. CLAN WILLIAM; 100m; 1/11/58 (total = 25)
(504) Same as previous stop.

CAPE PROV.

STOP 561: 12 MI. S.E. KLAVER: 140m; 1/11/58 (total = 200)
(518) Camped here. Deep sand & bush, low and open.
Below the River ^{DOORN} ~~Dam~~. Valley is here just
beginning to open up broadly.

KLAVER = (530) VAN RHYNSDORP = (544)

STOP 562: 18 MI. S.E. NUWERUS; 230m; 2/11/58. (total = 30)
(566) Succulents, rock type. low scrub. flat
ground. Well water washed. No bushes.
small boulders.

NUWERUS = (584) Bitterfontein = (593)

STOP 563: 19 MI. S.E. GARIES: 220m; 2/11/58 (total = 20)
(611) Small rocky outcrop. low bush and many
succulents. Very dry & dusty.

GARIES = (630) KHARKHAMS = (645)

~~STOP~~

(over)

CAPE PROV.

STOP 564: KHARKHAMS, 15 MI. N. GABRIES: 725m;

(646) Camped here. 2/1/58. (total = 25?)
Kharkhams is a small place. 50 or 60 homes.
Thorn acacia + low scrub. few kopjes.

STOP 565: 31 MI. S. SPRINGBOK; 700m; 3/1/58. (total = 20)

(667) Granite kopjes. jagged rocky hills.
sandy soil. True succulents here.
Very dry. poor collecting.

SPRINGBOK = (698)

VIDOOLS DRIFT = (775)

SOUTH WEST AFRICA

VIDOOL'S DRIFT = (775)

STOP 566: 18 MI. N. VIDOOL'S DRIFT: 430m; 3/1/58. (total = 30)

(793) East of the few granite hills. beginning of
open flats and alluvials sandy soil.
water washed. few succulents + desert.

KARASBURG = (868) GRUNAU = (898)
overnight here.

STOP 567: 9 MI. N.W. GRUNAU: 1150m; 4/1/58. (total = 40)

(907) Desert. First granite hills came upon on
way to Seeheim from Grunau. Few thorn
acacia sandy soil. surface boulders.

STOP 568: 37 MI. N.W. GRUNAU: 730m; 4/1/58. (total = 40)

(935) Canyon. Shale rocks on surface. Deep sand.
Small euphorbias.

SEEHEIM = (295): KONKIP = (020)

STOP 569: 13 MI. W. KONKIP: 970m; 4/1/58. (total = 10)

(033) Camped here. deep sand in river wash
patches of thorn acacia and grass. Few colonial
Ploceidae in trees.
↓
NESTS.

S. W. A

STOP 570: AUS: 1320m; 5/4/58. (total = 25)
(087) Rocky river wash. granite boulders.
few thorn acacia.

AUS = (086)

STOP 571: 37mi. W. AUS: 500m; 5/4/58. (total = 60)
(123) Shifting sand dunes. small rock
outcrop in the middle of nowhere.
Desert. Nothing but sand and gemstone.

AUS = (160)

STOP 572: KUBUB; AUS; 1450m; 5/4/58. (total = 400)
(169) Camped here. Kubub is a ranch name and is
some 3 miles from the town of Aus.
Granite hills. Sandy washes. acacia trees.

AUS = (176)

HELMERINGHAUSEN = (240)

STOP 573: 35mi. N. HELMERINGHAUSEN: 1420m; 6/4/58.
(275) Camped here. Broad valley. (total = 15)
Rock + sand. thorn acacia; low scrub and
patchy grass

S. W. A

MALTE HÖHE = (324)

STOP 574: 3mi. ~~N~~ E: MALTE HÖHE: 1320m; 7/4/58. (total = 150)
(327) Sharp rocks; thorn acacia + low bushy scrub.

STOP 575: KUIS, FISH RIVER: 1170m; 7/4/58. (total = 125)
(382) Kuis is on the Fish River. At this time of year
the river is nothing but pools. Thick low bush.
rock strewn surface. brown sandy soil.

KUIS = (382) KALKRAND = (395)

STOP 576: 34mi. N.W. KALKRAND: 1320m; 7/4/58. (total = 15)
(429) Dry creek bed. largest trees to be seen in
the area are here. large farm house nearby.

STOP 577: 14mi. S. REHOBOTH: 1350m; 7/4/58. (total = 75)
(443) Camped here. Small dip in the flats. trees 15 feet
tall are fairly common here. low scrub. Dry
river wash. brown sandy soil.

REHOBOTH = (457)

S.W.A.

REHOBOTH = (457)

STOP 578: 14 MI. N. REHOBOTH: 1500m; 8/1/58. (total = 100)
(471) Slate or shale rocks. Valley flats covered with round white (poss. Calcium compound) boulders. Thorn acacia and sparse knee-high grass. Very dry.

STOP 579: 10 MI. S. WINDHOEK: 1850m; 8/1/58. (total = 150)
(502) Quartz base hills white quartz with a peculiar mica of a metallic sheen. low grass. few thorn acacia + scrub acacia near the summit of the pass of the Anas Pts. Very dry.

WINDHOEK = (512 in) + (518 out)

STOP 580: 6 MI. W. WINDHOEK: 1660m; 8/1/58. (total = 75)
(524) Camped here. thorny acacia. knee-high grass. Typical Rhodesian savannah. Few rocks on surface. Brown sandy soil.

WINDHOEK = (530) OKAHANDJA = (571)

S.W.A.

STOP 581: 15 MI. N.W. OKAHANDJA: 1460m; 9/1/58.

(586) Camped here. 3 small rocky hills. sled stickers on grass. low, open woodlands; scrub + thorny acacia. (grasshopper at (637) + 1100m;

OMARURU = (653)

STOP 582: OKOMBAHE; 900m; MAY 10/58. (total = 130)
(695) Okombake is between the Brandberg Range and Omaruru. water running on the ground surface here for some 100 yards. Dry sandy; thorny acacia; low bush and much decomposed granite. On the Omaruru R. Bark tracks. Knock off 9 miles

↓

STOP 583: 10 MI. W. OKOMBAHE: 920m; 10/1/58. (total = 250)
(714) Camped here. On the Damara Reserve. granite kopjes. sandy soil. low, open scrub.

BRANDBERG RANGE (WHITE LADY PAINTING)

STOP 584: TSISAB CYN, BRANDBERG (RANGE) 550m; 11/1/58.
Brandberg range is west of Omaruru. (total = 175)
dry barren + rocky. Granite base sand and rocks. Camped here. Hydrophilids is Sulphur spring.

S.W.A

OMARURU = (877)

STOP 585: 19 mi. S. KALKFELD: 1420m; MAY 13/58. (total = 30)
(898) low scrub bush. Thorn acacia plentiful.
extremely dry. Few sharp rocks.

KALKFELD = (917)

STOP 586: 8 mi. S. OUTJO: 1150m; 13/V/58. (total = 50)
(965) Camped here. limestone formation hills.
poor coll.; extremely dry. Dusty.
thorn acacia savannah. Same type
of bothersome grass as found on the Limpopo R.
near Messina.

OUTJO = (973) in (975 out) + (986 again)

STOP 587: 2 mi. N.W. OUTJO: 1250m; MAY 14/58. (total = 250)
(977) Dry rocky ground; dusty.
low bush and thorn acacia.

STOP 588: 30 mi. N.W. OUTJO: 1250m; May 14/58. (total = 10)
(016) Savannah woodlands. Very few acacia.
(016) mostly mopane. large farm house near by.
low hills.

S.W.A

STOP 589: 10 mi. S. OKAVUUEJO: 1100m; 14/V/58. (total = 40)

(045) Camped here. border of the Etosha
Pan Park. low woodlands + mopane.
dry grass. flat ground. few rocks
Very dusty + dry.

OKAVUUEJO = (055)

RIET FONTEIN

STOP 590: 32 mi. N.E. OKAVUUEJO: 1050m; 15/V/58. (total = 225)
(087) Pond and spring beside road.

limestone rocks. Extremely dusty.
terrific H₂O collecting. low open bush.

NAMUTONI = (135) ONDANGUA = (222)

STOP 591: ONDANGUA: 1100m; 16/V/58. (total = 400)

Camped here for 2 nights. many man made
water ponds. Salty, though. Few old, endemic
trees. Borassia palms. Dry + dusty.

STOP 592: OSHIKANGO: 1180m; 17/V/58. (total = 6)

3 fleas, 1 dipteran (off bats) 2 Belanogaster.
+ four bats. Fleas + fly found on bats' ears
only On the Angola - S.W.A. border.

ANGOLA

V^a PEREIRA D'ECA = 298.

STOP 593: 7 mi. N. V^a PEREIRA D'ECA: 1100m; 17/V/58. (total = 125)

(305) tan coloured sandy soil. Dry. brown grass.
Sav. woodlands. Embiopsis (4) at light.
Mainly as mopane forest. Camped here

MONGUA = (334)

STOP 594: 19 mi. E. ROCADAS: 1080m; 18/V/58. (total = 50)

(341) mopane forest. woodlands. few very tall trees.
flat ground. grey sand. many logs on ground.

ROCADAS = (360)

HUMBE = (366)

STOP 595: 4 mi. S.E. ^{CAHAMA.} ~~CHAMBA~~: 1120m; 18/V/58. (total = 400)

(416) River Xing Camped here. Pools of water in
river bed. early morning bush beating. Small
rock outcrop. Sav. woodlands.

CAHAMA = (420)

STOP 596: 10 mi. N.W. CAHAMA: 1200m; 19/V/58. (total = 75)

(430) Granite boulders. mopane trees and dry
bush. poor coll. generally.

ANGOLA

CHIBE MBA = (465)

one large *Buprestid* here.

STOP 597: 24 MI. S.E. CHIBIA: 1320m; 19/IV/58. (total = 100)

(497)

camped here. Granite kopjes. many loose boulders on surface. hilly and bush covered land.

CHIBIA = (521)

STOP 598: 6 MI. N.W. CHIBIA: 1500m; 20/IV/58. (total = 100)

(521)

Brachystegia woodlands. light grey sand. Hilly. 2 spp. *Brachystegia* here.

SADA BANDEIRA = (547 in) + (548 out)

STOP 599: 10 MI. N.E. SADA BANDEIRA: 1700m; 20/IV/58. (total = 300)

(558)

camped here. Sav. Woodlands. reddish sand. good bark. coll on freshly cut logs.

STOP 600: 19 MI. N.E. SADA BANDEIRA: 1650m; 21/IV/58. (total = 140)

(567)

Same as previous stop. Sada Bandeira - Hoque Rd. many freshly cut trees. termite mounds.

ANGOLA

34

SADA BANDEIRA = (584)

STOP 601: 5 MI. E. V^o ARRIAGA: 1000m; 21/IV/58. (total = 325)

(607)

Camped here. Down the Great Escarpment. from Sada Bandeira. from 1750m to 1000m; Baobab trees small creek, spring fed, just about to dry up. Bush. Very dry and dusty. Granite boulders.

VILA ARRIAGA = (612)

STOP 602: 18 MI. S.W. ARRIAGA: 630m; 22/IV/58. (total = 50)

(630)

Set of very rocky hills. baobab trees are the 1121 tree. Sandy in spots. Bush and thorns. Very dry.

Caracul Experiment Station = (671)

STOP 603: 36 MI. N.E. MOCHAMEDES: 530m; 22/IV/58. (total = 250)

(678)

Camped here. Granite domes. Site of old rest stop built in 1881. Hollows in the granite domes have been concreted to store water. small horned vipers. Desert. low, scrubby, open brush.

MOCHAMEDES (713 in) and (718 out)

ANGOLA

MOCAMEDES = (718)

STOP 604: 6 MI. ^{N.E.} ~~N.E.~~ MOCAMEDES: 120m; 23/V/58. (total = 20)
(724) Dry ground. (heavy fog makes air damp) Sandy with boulders. very sparse, ground-hugging vegetation. Lichens plentiful. (vial only). Embrioptera stop.

STOP 605: 11 MI. N.E. MOCAMEDES: 180m; 23/V/58. (total = 75)
(729) Same as stop 604 (vial only).
Embrioptera stop.

STOP 606: 39 MI. S.W. ARRIGHA: 470m; 24/V/58. (total = 15)
(782) Bush. sandy soil with rocks. Rocky hills surrounding; steep and bush covered.

VILA ARRIGHA = (821)

STOP 607: 11 MI. N.E. ARRIGHA: 850m; 24/V/58. (total = 10)
832 Sandy soil. Dry bush. baobab trees
No leaves on baobab trees. Woodlands.

STOP 608: 32 MI. N.E. ARRIGHA: 900m; 24/V/58. (total = 125)
(853) Camped here. Essentially the same as the previous stop, only more ground water here. Woodlands more trees numerous.

LOLA = (867) DINDE = (876)

STOP 609: 14 MI. N. ^W ~~E.~~ CACULA: 1000m; 25/V/58. (total = 100)
(900) Bush in bloom. Flowers + sweeping.
River King. Scrub woodlands. Dry, sandy + rocky.

CACULA = (914)

STOP 610: CACULA: 1530m; 25/V/58. (total = 200)
(915) Woodlands. 20-30 foot trees. Trees much greener than areas previous. Green grass in spots.
Sandy soil. NO rocks.

STOP 611: 19 MI. N.E. CACULA: 1550m; 25/V/58. (total = 40)
(933) Camped here. Woodlands. reddish sand.
Reminds one strongly of the Katanga. Green grass + trees. Cacula-N'gola road.

NEGOLA = (951)

STOP 612: NEGOLA: 1550m; 24/V/58. (total = 100)
(951) Dry. Sandstone rocks on the surface.
Woodlands Hilly.

~~CH~~

ANGOLA

CALUQUEMBE = (781)

STOP 613: 7 MI. S. CALUQUEMBE: 1680m; 26/V/58.
(974) Large granite boulders on (total = 50)
surface. Deeply embedded. Woodlands.
Recent Rain.

CHICUMA = (011)

STOP 614: 10 MI. N. CHICUMA: 1520m; 26/V/58. (total = 10)
(021) Remnant of endemic forest in gully.
Escarpment. Dense undergrowth.

STOP 615: 18 MI. N. CHICUMA: 1200m; 26/V/58. (total = 175)
(029) Camped here. Sandy soil. Woodlands,
high and dense. Some large termite hills
as in Katanga. Somp soil + tall grass.

GRANDA (MARIANO MACHADO) = (054)

STOP 616: 5 MI. W. NOVA LISBOA: 1740m; 27/V/58. (total = 175)
(147) Camped here. Woodlands. tightly-packed
sandy soil. Cool nights. small, dome-like
termite mounds.

NOVA LISBOA (152 in) + (175 out)

ANGOLA

STOP 617: 12 MI. S. V^a TEIXEIRA DA SILVA: 1470m;
(210) Camped here. 28/V/58. (total = 20)
Heavy agriculture; Woodlands brown to
grey sandstone. Few 50-60' trees.

V^a TEIXEIRA DA SILVA = (222)

STOP 618: 13 MI. N.W. V^a T. da SILVA: 1520m; 29/V/58.
(235) Woodlands. Sandy soil. (total = 15)
NO rocks; few logs.

STOP 619: 14 MI. S.E. HENGUE; 1720m; 29/V/58. (total = 150)
(247) Woodlands. Crest of hill just before a big
drop into a large valley. Rough, peculiar
rocks on surface. Waist-high grass.

HENGUE = (261)

STOP 620: 2 MI. N. HENGUE; 1550m; 29/V/58. (total = 100)
(263) Woodlands. low grass. few 50' trees
Sandy soil. NO rocks.

NAMBA = (277)

ANCOZA

STOP 621: 15 MI. N.W. NIAMBRA: 1350m; 29/IV/58.

(292) Camped here. Woodlands. Rounded hills. Valleys are usually meadows, somewhat sloping and most always swampy. Few banana trees. Dots 80

STA. COMBA DÃO = (312)

STOP 622: 6 MI. N.W. STA. COMBA DÃO: 1250m; 30/IV/58. (total = 125)

(318) Woodlands. A bit off the new main road. Apparently near Tango, but no town is visible. Granite domes + rocky hills about.

STOP 623: 19 MI. S.E. EBO: 1270m; 30/IV/58. (total = 12)

(333) Woodlands. On the S. side of the Cuvo or Quevo River. Many rock pile graves on granite paves.

EBO = (352)

STOP 624: 11 MI. S.E. QUILENDIA: 1000m; 30/IV/58. (total = 75)

(386) Camped here. Rocky hills. Heavy agriculture. Coffee in particular. Granite outcrops. Sandy clay soil. High grass.

QUILENDIA = (397)

ANCOZA

STOP 625: QUILENDIA: 770m; 31/IV/58. (total = 150)

(396) about a half ^{or} mile ^{away} on the S.E. side of town. Coffee plantation with patches of original forest. Sandy soil.

STOP 626: 4 MI. ~~S.W.~~ S.W. QUILENDIA: 900m; 31/IV/58. (total = 200)

(400) Coffee plantation in the area of the old forest. Old, tall trees + some bush left. Owned by Rosa Emilia. STEEP hills.

Quilenda, Porto Amburim Gabela pit = (423)

QUIRIMBO = (419)

STOP 627: 4 MI. S.W. QUIRIMBO: 250m; 31/IV/58. (total = 50)

(423) Camped here. Quilenda is in the mountains. This stop + Quirimbo are in the lowlands. Baobab trees. Bush + high grass.

STOP 628: 10 MI. S.W. QUIRIMBO: 180m; 1/VI/58. (total = 75)

(429) Thick bush. Some grassy clearings. Baobab trees.

ANGOLA

PORTO AMBOIM = (463)

STOP 629: 3 mi. N.E. PORTO AMBOIM; 80 m; June 1/58.

(466) Powdered clay-like soil. (total = 25)
Grass + low surface vegetation.

Stenches at (481) and 150 m. Sand grassy
(18 miles N.E. of P.A.) mesa

CAPOLO = (500)

STOP 630: CAPOLO: 110 m; June 1/58. (total = 35)

(500) Grassy hills. remnant bush in spots.
Capelo R. Valley. Palm oil groves.
Some sandstone rocks.

STOP 631: 6 mi. N.E. CAPOLO: 100 m; 1/VI/58. (total = 40)

(506) Camped here. grassy mesa with isolated
patches of bush. cotton farms here.

STOP 632: 41 mi. S. MUXIMA: 100 m; 2/VI/58 (total = 25)

(532) Creek, apparently from a spring. Waterlilies
Bush and baobab trees.

DEMBA CHIO = (541)

ANGOLA

STOP 633: 19 mi. S. MUXIMA: 250 m; 2/VI/58

(554) Thick sand. Very dense bush. (total = 175)
and many tall trees. possibly ground
water here. Baobab trees are scarce here.
many trees over 60' high.

MUXIMA = (573)

STOP 634: 12 mi. N.W. MUXIMA: 200 m; 2/VI/58. (total = 100)

(585) Camped here. Baobabs en masse.
low, dense bush. open grassy spots
with hip high grass.

STOP 635: ~~12~~ LUANDA: 50 m; 3/VI/58 (total = 250)

Camped here for many nights. at the 6.6 km
marker north of town. On the road to Ambriz^{ete}
bush, baobabs and palms. ^{more accurately, on road}
to Caxito.

STOP 636: 27 mi. N.E. LUANDA: 40 m; 7/VI/58. (total = 25)

Under logs + in irrigation ditch in a palm oil
grove. Town here is probably Barra do Dande

STOP 637: 18 mi. N.E. LUANDA: 150 m; 7/VI/58. (total = 250)

Camped here. Euphorbias, palms, baobabs
bush and grass. Good sweeping.
Huge *Oecophila* nests.

En Route on Ships.

GHANA: TAKORADI: SEA LEVEL: 14/VI/58. (total = 300)

Along the harbour road. Same flowers on bushes,
but mostly sweeping.

GHANA: 6 MI. N. TAKORADI: 15/VI/58. (total = 75)

Forest Reserve. See E. S. R. Forest Service People are
just outside the customs gate.

IVORY COAST: ABIDJAN: 17/VI/58. (total = 450)

Forêt du Banco again. Dense rainforest.
epiphytic growth. About six miles from the
Harbour.

LIBERIA: MONROVIA: 22/VI/58. (total = 175)

at the St Paul River King. Small patch of
endemic forest. rain forest. On Livestock rubber property.

[illegible]